



THE Macdonald Farm Journal

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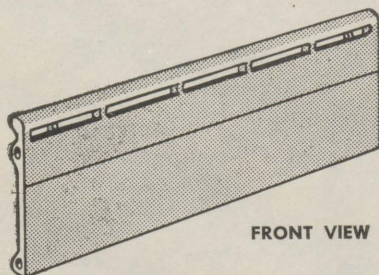
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Interest Or Pressure Group

Quite recently we read a very interesting excerpt from a speech made by Mr. H. H. Hannam, president of the Canadian Federation of Agriculture. The excerpt was published in the Federation's News and Information Service, and dealt with the place of pressure or interest groups in our economy.

We were particularly interested in these remarks, for coming from the president of an organization as highly thought of as the Federation they carried a weight that would not otherwise have been attributed to them.

Ourselves, we have never felt too happy about interest or pressure groups. Maybe they are necessary to the proper functioning of a democratic society, but we haven't been absolutely convinced yet. Rather we regard them in the light of a necessary evil.

It may be true that our legislators need constant prodding from "we the people," but personally we have our doubts that pressuring is the answer.

The thing we don't like about pressure groups is that, whatever they say to the contrary, they're working for one particular industry no matter what the effect on the others may be. We don't like this aspect. Witness the efforts of the textile industry to get added protection from what they call "U.S. dumping in Canada at less than cost," and see how they cloak their arguments by talking constantly of the hardships present government policy has upon the lives of the workers and living standards generally. This is not an appeal to reason, it is an appeal to the feelings and emotions. We believe such an attack clouds the issue. All pressure groups adopt this tactic, and as far as we are concerned it is the opposite of what an educational program would do.

That the interest group can, "inspire and encourage and facilitate group thinking amongst its mem-

bership," and this is taken directly from the speech, is a moot point. The prime motive of an interest group is not so much education as action along certain definite lines geared to the group interest, which while it may well be in the national interest may, at the same time, run counter to it.

This is as true whether we call the group interest or pressure, the leopard cannot change its spots by the simple expedient of changing its name.

The foregoing would indicate that interest or pressure groups are influence groups. Indeed the dictionary definition of the word interest is in part, "influence, especially social or political influence."

One final illustration; let us take a look at the pressure groups in the United States which have so successfully opposed the building of the St. Lawrence Seaway for more years than most of us care to remember. Has this been in the public interest? The answer, of course depends upon which side of the fence you are, but we think the majority of Canadians would answer, "No," if the question was put to them.

As we said in the beginning there may be no alternative to the pressure or interest group, but when we start talking about these groups let's be quite sure we know what they stand for and how they operate. Don't let's be fooled into thinking that they are or can be anything more than their name implies.

Our Cover Picture

Fall plowing as an expert does it. This is the world champion plowman at work last month during the plowing matches at Coburg, Ont.

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Antibiotics For Better Livestock Feeding

by J. M. Bell

Professor Bell, who is with the Animal Husbandry Department of the University of Saskatchewan, has made an extensive study of the use of antibiotics. In this article he tells us about some of the things he has found out.

NO development in the field of livestock and poultry nutrition has ever attracted more popular attention than the discovery that antibiotics can be valuable feed ingredients.

Sometimes they are referred to as "wonder drugs" because they have proved so effective in human and veterinary medicine. Penicillin is a good example, and since then other antibiotics have joined the parade in the fight against germs. It was quite by accident, however, that they were found to have growth stimulating properties when used as supplements in poultry and livestock feeds. Their effects are often quite striking but there are some risks involved in using them in feeds.

We have to understand them in order to use them for maximum gains while at the same time being aware of the dangers involved. Actually they are chemical compounds produced and used by bacteria for their own defence against disease. Each antibiotic has its own particular characteristic, some being more effective against one type of germ than another. Some affect a wide range, others a narrow one.

Antibiotics destroy germs, but the digestive systems of all animals are heavily loaded with micro-organisms; a few harmful, many beneficial and probably some that are quite neutral. No animal is normal without these bugs, and no antibiotic yet is capable of "sterilizing" the digestive tract. Antibiotics undoubtedly change the balance of power existing among these microbes, possibly making an increase in the beneficial ones possible at the expense of the less beneficial ones. This could account for much of the good effect shown by antibiotics in feeds but, of course, the final answers are not yet all in.

Don't Mix Your Own

Soon after their feeding value was discovered several manufacturing companies made feed grades available to organizations qualified to handle and distribute them. At first they were sold as A.P.F. (or Vitamin B₁₂) and antibiotic feed supplements, but now vitamin B₁₂ may or may not be included in the products available. In any event, most of the current products contain but a few grams of the pure antibiotic in each pound of carrier but even though it is diluted in this way it is not easy for the average farmer to mix antibiotics properly into his own feeds. The matter of mixing and the level used in the feed is quite important. Erratic changes due to fluctuations in antibiotic levels may seriously upset the digestive sys-



The heifer calf on the left was fed a milk substitute containing terramycin and shows excellent development and bloom. The calves are four months and three weeks old.

tem and result in diarrhoea or intestinal inflammation. Good mixing and proper levels are essential.

The most satisfactory way of obtaining a good mixture is to purchase the antibiotic as a part of other feed supplements that are ordinarily needed to balance the ration. Hog supplements, for instance, are now available containing such protein, mineral and vitamin supplements as are needed to balance the farm grain, in addition to an antibiotic. In most cases, feeding these supplements as directed by the manufacturer will achieve suitable levels of antibiotics in the final feed.

A general appraisal of research to date on antibiotics indicates that under ordinary conditions ten grams of the pure antibiotic per ton of feed is about the most satisfactory level. That would be the same as using five pounds of an antibiotic feed supplement containing two grams of antibiotic per pound of pre-mix.

Saving The Young Pigs

Swine production has probably benefited more since the advent of antibiotics than have other livestock excluding poultry. The raising of pigs has always been attended with rather heavy losses, in fact it is often stated that one third of the pigs born never live to reach market weight. Actually several factors are involved including bad management and mineral or vitamin deficiencies in either the pregnant sow or the young pigs, but one serious problem is that of scours, diarrhoea, or necrotic enteritis. Severe diarrhoea causes heavy death losses, and if not death, a set-back that may never be overcome. When these conditions are due to intestinal infection there is an excellent chance that the administration of antibiotics will give quick relief. However, the treatment is more costly than the prevention because heavier doses of the "drug" are required. The pigs also receive a set-back and it is not unlikely that the outbreak will recur and require further treatment. Several factors lead to such outbreaks even on apparently well-managed premises. The

adequacy of the ration used has a bearing on the general health of the pigs, and the presence of the diseases in or about the buildings is always a potential hazard for an epidemic may arise when ever conditions are right.

It is on farms where such danger exists that most benefit will be derived from feeding antibiotics. If the "disease level" is high, it will be advantageous to include antibiotics in pig rations from the very start to reduce losses from intestinal infections. Better growth and a striking decrease in the number of runty or unthrifty pigs usually result. It is often possible to obtain remarkable recoveries in runt pigs by starting antibiotic feeding at weaning time or later, and continuing until the pigs are progressing satisfactorily.

Antibiotics brought in new ideas on raising baby pigs artificially. Semi-synthetic milks are now being sold for the purpose of saving surplus pigs in a litter, or pigs whose mother failed to give milk after farrowing or even for the purpose of weaning pigs at a few days of age in order to permit the sow to be re-bred almost immediately. While some excellent results have been obtained at times, it is probable that a few of the advertising claims are somewhat in advance of good sound and practical considerations.

No milk replacer can yet be relied upon to replace colostrum (mother's first milk). Antibiotics in milk replacers do not compensate for unsanitary housing or feeders, nor will they give protection against chills, pneumonia, arthritis, hemorrhagic septicemia, or other infections often associated with unsatisfactory facilities. In other words, if baby pigs are to be reared successfully away from the sow, they must be housed in warm, dry, draught-free quarters, and fed from milk containers which discourage or prevent soiling by the pigs' feet. Thorough dairy cleaning of the feeders is also essential if the warm milk is to be kept from spoiling for a day. Under conditions such as these pigs at three to four weeks of age at the University of Saskatchewan have been known to gain as much as a pound a day. Thus, it is not difficult to have pigs weighing well over forty pounds at eight weeks of age if the operator is able to provide suitable facilities and devote the proper attention.

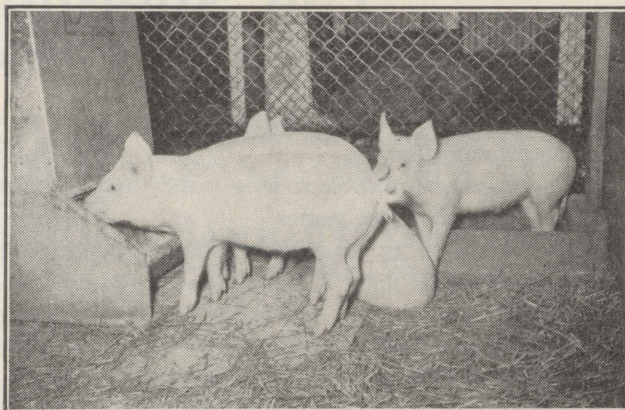
An important battle has been won if most or all of the pigs farrowed by a sow can be saved and brought uniformly to high weaning weights. But what about the cost? Milk replacers are sold in dry form at prices ranging upward from about 20 cents to well over 50 cents per pound, which means that if costs are to be kept down the change to less expensive solid feed must be made as early as possible. Pigs often like the "milk" so well that they are slow to accept grain mixtures so it may be advisable to use a good brand of palatable and nutritious starter, perhaps in pellet form, containing the same antibiotic supplement that is used in the "milk" in order to make a smooth change-over. Under these conditions the minimum cost per pig for milk replacer alone will usually

range upwards from \$3.00. Thus it is important that death losses from poor management be held to a minimum and that set-backs do not occur at "weaning" time due to slow acceptance of solid feed.

Be Careful In Feeding Calves

Many dairymen experience difficulty in rearing young calves. General unthriftiness, scours, pneumonia, and death have taken heavy tolls on some farms. True, losses have been reduced during the last decade by more widespread use of vitamin supplements, and of nutritious calf meals and starters which definitely improve the calf's resistance to infection. Scours, however, continue to worry some dairymen even though good management prevails.

Nutritionists hesitate to include antibiotics in the rations



Pigs in Advanced Registry Stations across Canada now receive an antibiotic-fortified ration until they weigh about 140 pounds.

of ruminants like cattle and sheep because it is well known that such animals depend greatly upon the bacteria and other microorganisms in the paunch. In experiments where antibiotics were fed the result has often been to decrease the digestibility of the feed; sometimes diarrhoea and loss of appetite. But in the case of the young calf which does not have a functional rumen until it is several weeks of age, it may be possible to use antibiotics to obtain some protection against scours and perhaps, as in pigs and poultry, get a worthwhile stimulation in growth rates as well. Frequently this is what happens. Calves raised at the University of Saskatchewan from two days to four months of age on an antibiotic-fortified pig milk replacer were considerably heavier than normal Holstein calves at two months of age. They possessed excellent "bloom", did not suffer from scours, and consumed substantial quantities of roughage as they grew older. Some authorities are of the opinion, however, that the inclusion of antibiotics in calf feeds should not be encouraged until more research is done.

Watch For A Reaction

One who does not understand the tactics of microbes may not be impressed by words of caution voiced occasionally regarding the feed use of antibiotics. Some people fear the advent of new resistant strains of diseases just as we now have large numbers of flies that are resistant

to D.D.T. It is conceivable that this could occur but considerable protection is afforded by the wide range of antibiotics becoming available.

There is some evidence that the inclusion of antibiotics in feed from an early age in the animal may interfere with the development of natural resistance. The sudden withdrawal of antibiotics from the feed can result in serious trouble, particularly if environmental changes occur simultaneously. Such might be the case in raising pigs, or calves, if at time of weaning from artificial milk they are moved to new quarters.

Some investigators have reported that the use of antibiotics in swine rations after the early growing stage will cause excessive fattening. In many instances this

could result in lower grades and decreased returns to the producer. Obviously more work on this point is urgently needed.

Antibiotics are likely here to stay. They have already effected marked improvements in practical livestock feeding and we are certainly only at the beginning. New antibiotics, new antibiotic combinations, new methods of administration such as implantation under the skin, offer new challenges and new hopes for better livestock production. There is even now some evidence to indicate that the use of antibiotics will eventually permit the feeding of rations containing smaller quantities of supplemental protein and of certain vitamins, but until the haze has cleared let us not regard antibiotics as shortcuts to good feeding, good sanitation or good management.

The Shepherd's Calendar

by W. H. Hough and S. B. Williams

December

Move the flock into the winter quarters when snow covering prevents grazing.

Cold does not harm sheep so long as they have adequate feed and shelter from the storms.

Allow access to an exercise yard at all times except during storms or at night if the dog menace is prevalent.

Feed the better quality hay to the bred ewes and the poorer hay to the rams and the lambs.

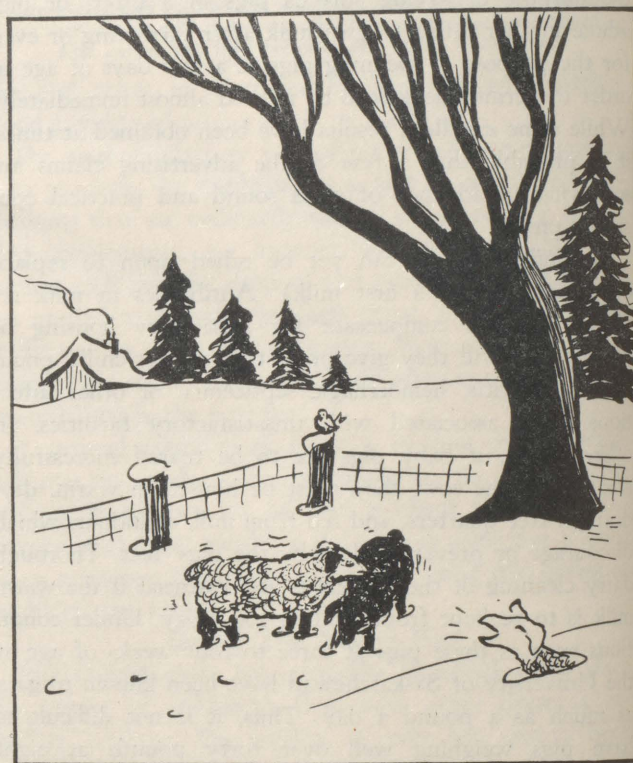
If hay is of poor quality feed a mix of half oats and half barley at the rate of one half pound of the mixture per head per day to the bred ewes.

All sheep should have access to a salt and mineral mix. A mixture of equal parts of feeding bonemeal and iodized salt is adequate in most areas. If specific deficiencies exist, the missing minerals can be added to this basic mixture.

Feed the keep-over lambs a grain ration of half oats and half barley at the rate of one half pound of the mixture per head per day.

Don't forget to save the best quality legume hay for feeding to the pregnant and nursing ewes in February, March and April.

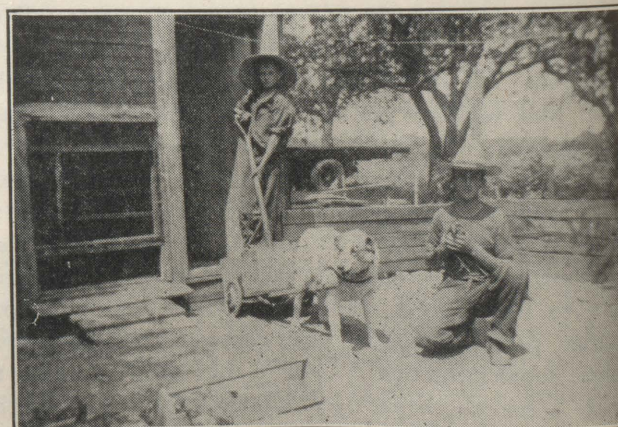
If available, feed good quality grass or corn silage free from frozen or mouldy lumps, at the rate of three pounds per head per day. Roots can be substituted for silage.



Move the sheep to winter quarters.

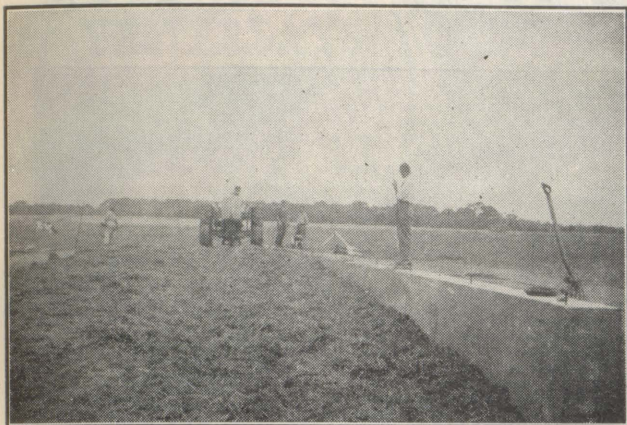


Everyone works on the Wanzer farm near Bedford. Here's Mr. Wanzer's son Rodney cultivating the carrots with his dog.



Now you know what is meant by the saying, "leading a dog's life." Here he's helping Raymond and Rodney Wanzer to clean out the brooder house.

Upright Or Pit?



This is the longest pit silo in Quebec. It's on the Meredith farm and measures 99 feet in length.

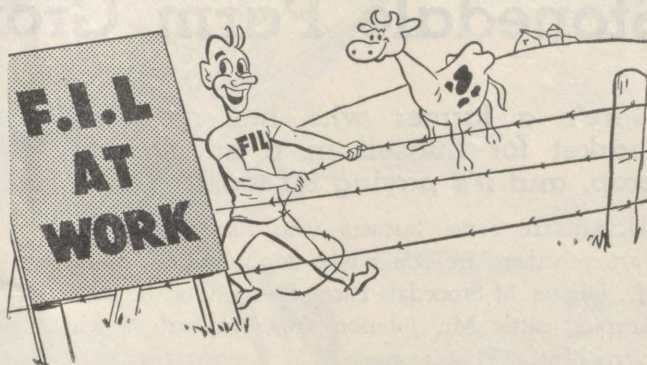
IF you're thinking of putting in a silo for grass this coming year, this article should be of interest to you for it lays out some of the arguments for and against various types of silos. Cost is a big factor in making this decision one way or another, and this involves the grass harvesting methods used or contemplated as well as the actual cost of silo construction.

Grasses and legumes may be ensiled either chopped or uncut. Such factors as farm equipment, labour for harvesting, tonnage harvested, and the type of silo available, will determine whether the crop will be chopped or not.

Long grass for silage may be handled in the field with the regular farm equipment such as mower with swathing attachment or mower and side-delivery rake, and a green crop loader. The silage sweep rake may also be used effectively for moving the crop short distances. Harvesting the crop by the former method requires considerable labour and becomes costly when large tonnages are involved. The sweep rake method requires only a modest investment in silage equipment and will handle 1½ to 2 tons per hour where the length of haul is less than one-third of a mile. Chopped silage may be obtained from two general methods of harvesting. The crop may be brought to the silo in the uncut form and then put through an ensilage cutter or it may be harvested initially, with the forage harvester. Where more than 200 tons of silage are required, the forage harvester method provides the lowest cost per ton for harvesting and the least amount of labour.

Uncut silage crops can only be stored in horizontal or pit silos, while the chopped crops may be ensiled in a number of silo types. Thus, type of silo is an important consideration, as the standard upright silo or the horizontal silo with constructed walls are more efficient storage houses than silage heaps built on the side of a hill or on top of the level ground. In addition, in filling operations, the chopped forages are easier to unload, spread and compact than the uncut crop.

Palatable nutritious silage can be produced from either chopped or unchopped forages. However, experimental



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results at the Experimental Farms clearly show that silage losses are greater for uncut sillage. In addition, uncut silages are more difficult to remove from the silo for feeding than the chopped forages.

"JOE BEAVER"

By Ed Nofziger



Forest Service, U. S. Department of Agriculture

"Its original function was to hold back water."

Stonedale Farm Grows A Special Crop

by Colin Muirhead

Here's a farmer who has made a market for himself in a specialized crop, and it's paying off too.

THERE are some farmers who like having cattle around; there are others who don't, and one of these is Mr. Johnson of Stonedale Farm, Foster, Que. So instead of keeping cattle Mr. Johnson grows rhubarb, a whole ten acres of it.

Now all this seemed somewhat unusual to me, so I asked him how he got into the business. "Well it's like this," he told me, "I wanted a cash crop and had worked for twelve years for an establishment which grew rhubarb. I had a pretty good idea what to do so I decided to go into the business myself."

By all appearances it has been a happy and successful venture for Mr. Johnson. He lives in a large pleasant house which he remodelled himself, and when he sits in his large-windowed living room he looks out over one of the most beautiful views in all Brome county.

He has a 140 acre farm, of which ten acres is rhubarb. The rhubarb remains in the field for two years, so what he does is to have two five acre plots, one ahead of the other, in this way he always has a supply of roots for use in the forcing sheds each winter.

Rhubarb doesn't grow like a normal crop. For instance, when the roots are dug out of the fields in late October or early November, they are left lying on the surface until they have become frozen solid when they are moved as required into the forcing sheds with no more soil around them than is clinging to the roots.

Frozen Roots

When I arrived to talk to Mr. Johnson, he was building a cement manure pit in which to store the manure from his 64 hogs. He needs all the manure he can get for his ten acres of rhubarb, and incidentally we think it's an excellent idea to store the stuff in a pit, it cuts down losses of valuable nutrients to a minimum.

Regarding the soil on the farm, Mr. Johnson told me that it is mainly a heavy clay and as many of the fields



Mr. and Mrs. Johnson on the front lawn of their home with Mr. Johnson's mother and their little niece.

are situated on the gently sloping side of a valley, natural drainage is all that is needed.

When the roots are dug up just before the frosts begin, they have been growing in the fields for two years and have developed plenty of growing energy, and they'll need every ounce of it before Mr. Johnson is through with them.

Two men dig up the roots, using a specially built two-pronged fork with which they dig under the root system; about one foot down is all they need to go. The roots are eased out gently, and this is a tricky operation for each root must be intact, loss of part of a root slows down growth in the forcing sheds and shakes the soil from around them. It is important that as much soil as possible be kept around the roots as no more is added in the forcing sheds.

As soon as the roots are frozen, usually around the end of the first week of December, they are placed in the forcing sheds and then they really begin to work. From the time when the first roots are placed in the sheds until the end of April a succession of root plantings follow each other in the forcing sheds and they are made to produce until they are exhausted. These forcing sheds are long low structures with a wide alleyway down the center along which the wagon is driven. When planting the roots are just dropped into place from the wagon as closely as possible.

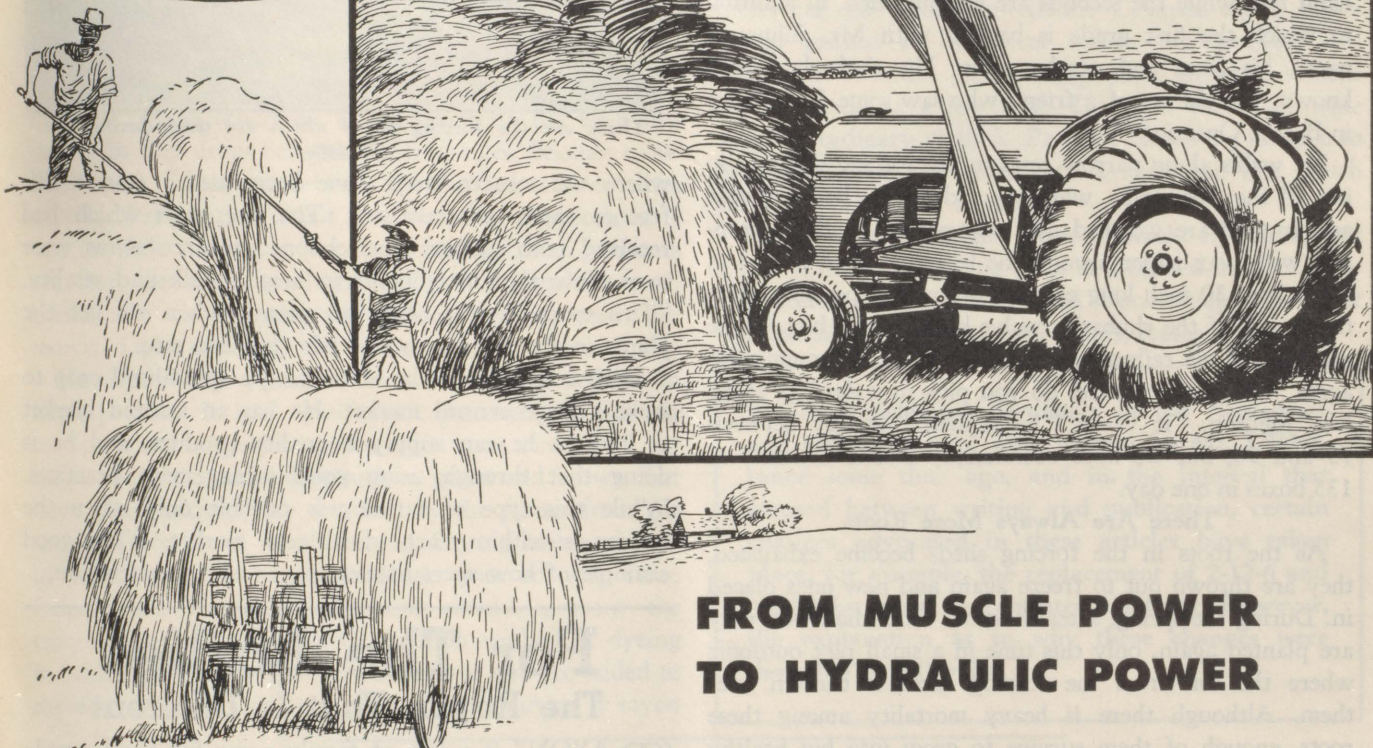
Close The Doors And Turn Up The Heat

Once a shed has been fully planted, all the doors are shut and the temperature turned up to 60°F. The roots can be thawed out quickly or slowly, it makes no difference, but once thawed the temperature must not be allowed to go much above the 60°F or the stalks show a tendency to turn white. The steam heat is supplied by a boiler and carried through the forcing sheds by pipes raised about three feet off the ground. It takes the roots about one week to thaw out, after which they are watered



One of the fields of rhubarb.

YESTERDAYS IN AGRICULTURE



FROM MUSCLE POWER TO HYDRAULIC POWER

In lifting drudgery from the backs of those who produce our food, the use of hydraulic lift equipment on the tractor in 1935 marks a mile post in the advance of farm mechanization.

On modern farms hydraulic loaders are finding scores of new uses besides the one shown above. Back-breaking jobs such as fencing and excavating are being shifted to hydraulic power. Hydraulic controls for tractor-mounted and trailing farm implements are making possible finger-tip control of massive assemblies,

thereby conserving human energy, setting new standards of operator safety and comfort, and producing more and better work in a given period of time.

Imperial Oil engineers have watched developments and have studied the requirements of hydraulic systems for hydraulic fluids. Providing special products where needed and perfecting scores of products in common use are ways in which Imperial Oil contributes to an efficient and progressive agricultural industry.



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Farm Division

heavily until about two feet in height.

Mr. Johnson does all his own picking, but he needs extra labor in the packing room. Four men will do the job, but as Mr. Johnson said, "It's a tough job these days to get any sort of labor for a short period." Usually, however, he manages to recruit some help from the younger sons of nearby farmers.

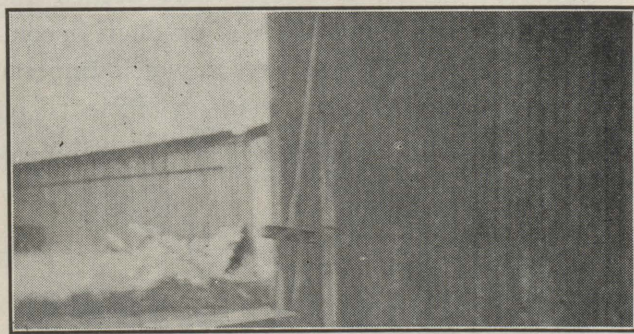
Packing the produce requires skill. Mr. Johnson grades his rhubarb, first and second. All first grade bundles are hand tied while the seconds are machine tied, in addition to which the first grade is banded with Mr. Johnson's name, his farm and nearby town. His rhubarb is well known, he told me of a friend who saw some for sale up in Barrie, Ontario!

He walks along narrow rows in the forcing sheds picking all the ripe stalks, which in addition to being graded and banded are weighed into one pound bundles, wrapped with wax paper around the base and then placed in 27 inch or 30 inch long cardboard boxes, depending upon the length of the rhubarb, twelve bundles to a box. These are shipped via railway express to a Montreal commission agent. "How many boxes do you pick in a day?" I asked Mr. Johnson. "It varies," he replied, "usually between 75 and 90, but we have occasionally picked as many as 135 boxes in one day."

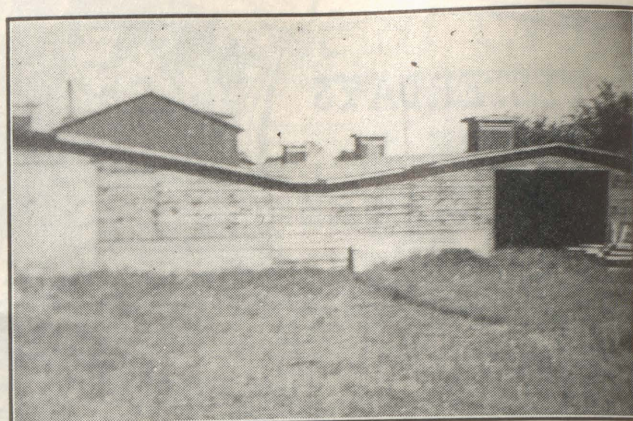
There Are Always More Roots

As the roots in the forcing sheds become exhausted, they are thrown out to freeze again and new ones placed in. During the spring, after these old roots thaw out, they are planted again, only this time in a small plot outdoors where the soil from the forcing sheds is thrown over them. Although there is heavy mortality among these roots, enough of them survive to grow into big healthy roots so that buds may be cut from them in the fall and planted in the fields. The buds are cut very much as you would cut an eye from a potato for planting.

I was curious regarding the number of plants laid out per acre. Mr. Johnson soon told me, "about 2,400 plants per acre," he said. "Once they have been laid out they should be manured heavily," he told me, "in addition to which I try to get a hold of all the chopped tobacco stems I can. They come from Granby," he said, "and I never get enough. Come out to the fields," he continued, "and I'll show you the difference in the size of the rows



This is the special type of fork Mr. Johnson uses to dig out the rhubarb roots before taking them into the forcing sheds.



These are the forcing sheds which are used during the winter.

where the tobacco stems have been used." And a difference there certainly was. The five rows which had received both manure and chopped tobacco stems were way above their neighbours in height, bulk and vitality. "This extra growth is worth plenty when we get the plants in the forcing sheds," Mr. Johnson said.

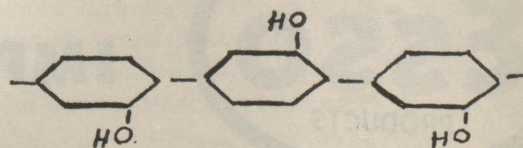
Here is a farmer who is growing a specialized crop to serve a large central market. He has an assured market as long as he can supply a quality product, and he is doing that through using good management practices. While this type of farming is possible only when the farmer is within reach of a large market, it's a good example of how specialization pays off in agriculture.

For The Ladies The Rayon That Is Different

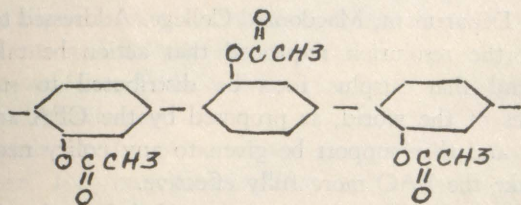
"RAYON" is a sort of family name for three textile fibers: viscose, Bemberg, and Celanese which is also known as cellulose acetate or simply acetate. Viscose and Bemberg are as similar as two sisters; Celanese is a distant relative indeed, and quite unlike the others. If we are to choose the best cloth for each garment we buy, and if we are to give this cloth the best care, we must distinguish between the two groups. What is right for the one may be quite wrong for the other.

Both owe their existence to the same material, cellulose. Now cotton and linen too are cellulose; but nature made cotton and linen, man made the rayons. Man is more intelligent than nature, he can build into his fibers the exact qualities which are useful to us. But he is no better craftsman, and his products too have flaws, flaws that we must understand if we are to use his fibers wisely and to our satisfaction. So it is with Celanese, a beautiful fabric, but a fabric which has its faults.

Cellulose is built up of molecules as a wall is built of bricks. Chemically, the molecules look like this.



To make cellulose acetate, man ties tag-ends of acetic acid (the tart acid of vinegar) to the cellulose molecules. Scientists tell us they may look like this.



These tag-ends of acetic acid cause profound differences between Celanese and other cellulose fibers. When crushed they flatten; when the pressure is released, they spring back, making Celanese more crease resistant. They stop moisture which otherwise would penetrate the fiber and collect in tiny drops between the molecules. Because moisture must remain on or near the surface, acetate dries rapidly. Perspiration is not absorbed. The chemicals in it can do little damage to the cloth, but Celanese garments are not the most comfortable for hot weather wear. Stains also remain near the surface and are easily removed. Light washing only will cleanse it.

Have you ever owned a dress that turned reddish in large patches? It had "gas-faded". Because it is difficult to dye acetate, special acetate dyes were developed. Of these, the blues and colors such as green and brown that have blue in them, are attacked by the fumes from gas and coal stoves and from factories. Storing acetate dresses in plastic garment bags reduces but does not stop fume fading. Manufacturers can, and should, prevent the trouble. They can use the Chromspun method of dyeing in which very finely ground particles of dye are added to the fiber when it is being made. Before buying a rayon

dress, look at the label. Does it offer any guarantee against gas-fading?

Acetate dyes have another fault. They migrate. A piece of colored acetate cloth may discolor a piece of white acetate laundered or stored in contact with it. The dye simply wanders over from one piece to the other.

Celanese is thermoplastic. As it is exposed to increasing heat, it softens, then melts. So if, in some absent-minded moment, we put a hot iron on a Celanese blouse, we find nothing, absolutely nothing where it had rested. But faults can be turned to virtues. Celanese moire has a design pressed in by warm rollers. No moisture can remove it. Celanese pleats stay pleated. Celanese ribbons can be made at a low cost. They are woven in wide strips as ordinary cloth is. Red hot blades cut them into bands and fuse the edges into a hard fine line which takes the place of a selvedge.

How can we tell which fabric is which? By pulling out a few yarns and touching them to a lighted match. Cellulose acetate melts into a hard black lump; the other cellulose fibers burn, and leave a soft, feathery gray ash.

• The articles on Fertilizers in our September and October issues, were written by Mr. L'Espérance some time ago, and in the interval that elapsed between writing and publication, certain changes advocated in these articles have taken place, for example, the replacement of 2-12-6 and 4-8-10 by more concentrated mixtures. However, the explanation as to why these changes were desirable is still valid.

Leadership Forum A Big Success

by Roberta Ridley



There was a good turnout at the Tri-County Leadership Forum held at Compton.

THIS was the big night. After five days of strenuous activity, the Tri-County Leadership Forum was holding its final public meeting in the Ives Hill Community Hall. The one-time school house, perched high in the rolling Compton hills, fairly shook with the song and laughter and talk of seventy people. Outside, cars jammed

every bit of free space. Some had come from as far away as forty miles. There were men and women from three counties: Compton, Sherbrooke and Stanstead; a good many representing local Farm Forums.

It was almost 10:30. Leslie Young, appointed chairman for the evening, had a good look around. Lunch was nearly over, cups were being gathered up. In planning the program, the TCLF's twenty members, who had spent the last five days working together at the Green's home near Compton, had decided to ask the audience for comments on the evening—likes, dislikes and suggestions—to evaluate how things had gone. In a few moments, they would hear the results.

How would the audience react? The chairman was not alone in wondering. All who had a share in putting on the program, and that was the entire Leadership Forum, wondered with him. Everything had gone according to the schedule they had drawn up together. The meeting had started promptly at eight with games and dances. No one was left out. Even the latecomers were drawn into the fun the minute they stepped in the door. There



Everybody took an active part in the proceedings. Leslie Young talks over the days activities with Keith Russell.

had been Walter Hodgman's talk on the beginnings of the Forum. "It was a good idea", everyone had said, "but it couldn't be done". Walter and a few others refused to be discouraged and plugged away. The result was a registration far greater than hoped for.

Then voices, true and false, were raised in a general sing song, each song led by a different Forum member. Even the most serious part of the program had seemed a success. It had taken a lot of planning. At first, the Forum thought of submitting two formal resolutions, one dealing with FAO; the other with farm woodlots, adopted by the TCLF, to the large meeting for approval. But someone objected. "Take tree farming, for instance", he said. "We spent a whole day on it. We had a talk from Dr. Pogacnik of Howard Smith and then a practical demonstration on cutting in Fred's woodlot. After that we got together for discussion in small groups. By this time, the big problem in our minds was how to control the slashing of woodlots." An excited voice broke in. "Why not give the audience a chance to discuss the problem and report their conclusions?" Suggestions were tossed back and forth until it was agreed to present the facts impartially to the audience and then organize the crowd into discussion groups of three. Half the groups were to tackle: "What methods do you recommend for tree farming?"; the other half: "How can we help FAO to be more effective?" Reports from each group were to be read out after twenty minutes of discussion.

The audience liked it. Discussion was animated and earnest. On the tree farming question, they went straight to the heart of the matter, as group after group reported that improper tree cutting must be stopped and the way to do it was to have restrictive legislation. A minority of five groups felt that education alone would do the job and another ten voted for a combination of legislation and education. A great hush hung over the room as each report was read and there was a ripple of pleasure and surprise at the general agreement of opinion. And, hanging in the air, was the thought that, after all, seventy people could go far in launching an effective campaign.

Where FAO was concerned, the audience unanimously

approved the resolution already adopted by the TCLF on the of a talk by Dr. William Haviland of the Economics Department, Macdonald College. Addressed to local MP's, the resolution requested that action be taken to the end that surplus food be distributed to starving peoples of the world, as proposed by the CFA and the CCL, and that support be given to any policy necessary to make the FAO more fully effective.

At this point, the program provided for a break that brought people to their feet and shook out tired muscles. (Forum members were sold on the necessity of active recreation in between the serious parts of a program). This done, Keith Russell told how the experience of the Tri-County Leadership Forum would be useful to him in carrying out his new duties as provincial secretary of the Quebec Farm Forum Association. Floyd Griesbach, secretary of National Farm Radio Forum, told of action projects, both regional and national, that were a direct outcome of Forum Findings sent in to national headquarters by local Farm Forums after each broadcast.

Time for lunch. TCLF members had strong views on this subject. Lunch for seventy should be served, consumed and over with in twenty minutes. Tonight it had



Gordon Lang paying his fee over to Gordon Bowker.

been done in 16 minutes and no one had been rushed. The committee that mapped out strategy beamed happily.

Now the evaluations were all in. The chairman rose to his feet. As he read out each sheet, a blackboard record was kept. Comments were not just favourable, they were enthusiastic. Likes: the audience liked everything and some said so. Others specified: timing perfect; well-balanced program, family atmosphere, games, having TCLF members assume public responsibilities, discussion of tree farming and FAO. The list went on. Dislikes were few and none more serious than "those peanut butter sandwiches" except for a sensible recommendation that better ventilation be provided. "More evenings like this one" and "Make Leadership Forums a regular thing all over" were the two most frequent suggestions.

The program had been an unqualified success. TCLF members relaxed visibly. Before the Forum, few would have thought of themselves as leaders, at home or else-

where. After tonight, they were not so sure. These had been five days of exploration and discovery. Discovery, above all, of talents and wisdom within themselves. And a realization that leadership was a sharing of responsibilities, to which each individual brought his own contribution in his own way.

Chords at the piano. "Men in one line, women in another" for Jinny Cracks Corn and I don't Care. The audience sashayed up and down, the tall swung the short, the plump puffed but got there and everyone cheerfully worked up a lot of steam.

Too quickly came official closing time. In a tremendous circle, with hands joined, men and women of three counties and further softly sang "Bonsoir, mes amis, bonsoir". Etrangers at first, by the end of the evening they said goodnight as friends.

Full-time participants in the Tri-County Leadership Forum:

Mrs. Desmond Bain, East Clifton
Gordon Bowker, Sawyerville
Rev. R. A. Cameron, Sawyerville
Mrs. Hollis Graham, Wyman, Pontiac Co.
Mrs. Dorothy Green, Compton
Fred Green, Compton
Miss Elizabeth Green, Compton
Richard Green, Compton
Floyd Griesbach, Farm Forum, Toronto
Mrs. Adeline Griesbach, Toronto
Mrs. R. Hodge, Cookshire
Walter Hodgman, Birchton
Gordon Lang, Howick, Chateauguay Co.
Mrs. Jack Murray, Birchton
Roberta Ridley, Adult Education Service, Macdonald College
Keith Russell, Farm Forum, Macdonald College
Rod Telford, Shawville, Pontiac Co.
Russell Nichols, Compton
Douglas Young, Compton
Leslie Young, Compton

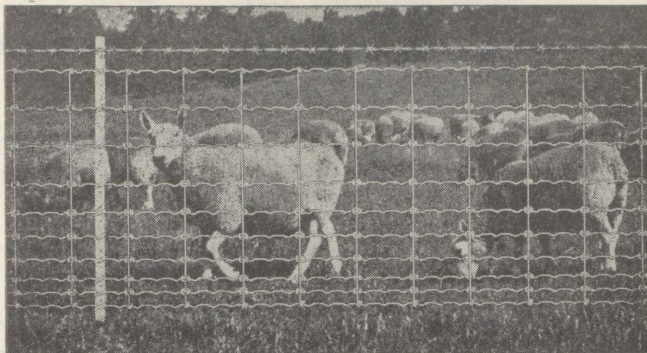
Changes In Dairying

Here is a picture of what has been happening in the dairy industry in his Province, advises R. J. MacSween, Director, Marketing Services in Nova Scotia:

	1940		1952	
	Lbs.	Per Cent	Lbs.	Per Cent
Total Milk Production	447,512,600	100	416,840,000	100
Fluid Sales	89,811,000	20	145,772,000	34
Creamery Butter	135,535,000	30	116,049,000	27

In 1940, only one-fifth of the total milk production was used in the fluid milk trade, while in 1952 this proportion had increased to over one-third. On the other hand, the volume of milk going into the manufacture of creamery butter decreased from 30 per cent in 1940 to 27 percent in 1952. Incidentally, says Mr. MacSween, it may be interesting to note that for the first seven months of this year there was an increase of 16 per cent in creamery butter production in this Province.

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PURITY OATS



DEPARTMENT OF AGRICULTURE

*Activities, Plans and Policies of the Quebec
Department of Agriculture*

Department At The Dairy Show

The Department of Agriculture's Dairy Division was the feature at the Dairy Show held in the Montreal Show Mart from October 23rd to 27th. It occupied the central section of the exhibit and concentrated on showing how its inspection service works to keep the quality of Quebec dairy products up to standard or better. The big cheese, first shown at the Quebec Fair, was on display again and the life-sized statue of Mayor Houde, sculptured in butter and shown in a refrigerated glass case, was a sure crowd-stopper. The Provincial Dairy School shared part of the space with a display of the laboratory equipment used in testing dairy products of all kinds. The process of cheese-making, stressing cleanliness at all times, was illustrated with a good selection of coloured slides.

How the statistics of dairy production in Quebec are gathered and compiled was the theme of the Department of Trade and Commerce's booth. The Montreal Milk Producers had a waterfall of milk flowing down the wall of their booth with samples of all the products that can be made from it in a well-arranged display.

There were two companies showing how aluminum bottle caps are made and used. There is a machine that punches the cap out of a strip of foil and seals it onto the bottle in one operation. Another machine seals on the caps which are purchased ready-formed from the manufacturer. It is claimed that these aluminum caps are more

sanitary than the cardboard type, in that, beside sealing the bottle, they also cover the pouring lip, something that the cardboard caps do not do. Once removed in the home, they can be replaced on the bottle easily and continue to protect the pouring lip as long as the bottle is in use. They can, however, only be used by dairies which have switched to the narrow-necked bottle; those with the familiar wide opening are not properly shaped for capping with aluminum with present machinery.

Displays of all sorts of equipment used in the dairy business were on view; pasteurizers, delivery trucks, bottling machines, paper bags of all kinds, washing compounds and so forth. One interesting display was that of the Granby Co-operative, which demonstrated all the products made from milk in their plant.

Attendance was rather disappointing, and we feel that public interest might have been keener had one or more of the large dairies in Montreal erected a display to illustrate how they handle milk from the time they receive it until it reaches the consumer in one form or another. Perhaps the Show was held too soon after the Food Show which had been held the week before. However, those that attended certainly learned a lot about the place of milk in our economy and it will doubtless serve to stimulate interest in the Salon of Agriculture which is scheduled for next winter at the same place.



The display of the Department of Agriculture featured the big cheese, seen in right foreground of the first picture. The butter statue of Mayor Houde can be seen in its refrigerated case, and a close-up showing the excellent modelling is in the centre panel. The picture on the right shows the exhibit prepared by the Provincial Dairy School.

Higher Tops, Lower Averages

HIGHER prices for the champions reflected the continued support of the Sherbrooke Winter Fair by the commercial buyers, but lower average prices for the sale as a whole (about 10 cents for steers, 14 cents for lambs and 8 cents for hogs) reflected the general drop in livestock prices since last fall. A larger entry list than ever before reflected the interest in beef breeding in the Sherbrooke area, and the culling committee had to be more rigorous than usual to keep the numbers down to manageable proportions. Even so, there were 123 steers on the sales list, an increase of 30 over last year. Increases were also registered in the other classes; there were 76 lambs as against 64 last year and 82 hogs compared with 76 in 1952.

Last year's experiment of holding the Winter Fair later than usual apparently worked well, and the directors set the dates this fall for October 12 to 15 inclusive. Junior work took up all the first day, and judging of the breeding classes went on all day on the 13th. Market classes were judged on the 14th and the morning of the 15th was taken up with preparations for the sale that started at 1.30 p.m.

Fair days are busy ones for exhibitors, but they had a chance to relax during the evenings. Canada Packers sponsored a square dance competition one evening, the first of what is promised to be an annual event. Eight young people, all members of the Hatley Calf Club, won the event. The annual tug-of-war also created a lot of interest the same evening. The last two days of the fair coincided with the Horse Show, which had this year, as an added attraction, the Musical Ride of the R.C.M.P. and which was held before a crowded Arena. Those who missed the ride in the Arena had a chance to see the Mounties when they paraded through the streets of Sherbrooke during the afternoon.

Close Race For Championship

C. D. French's 884 pound Hereford steer took the championship ribbon this year. E. G. Smith's Chanbay



The weighmasters get up early on the day of the sale.



Chanbay Farm had both champion and reserve wethers.

Farm showed the reserve, an Angus which, in the opinion of many of the ringside judges, might just as easily have been the champion. The champion in the Shorthorn breed came from the herd of Mrs. Pitfield of Saraguay.

Chanbay Farm also had both grand and reserve champions in wether lambs, and Benoit Lacourse of St. Wenceslas had the best pen of hogs; Georges Ricard of St. Michel had the best pen of five.

A new buyer took home the grand champion steer. Edgar Mailhot, who has a butcher shop in Montreal, paid \$2.25 a pound for him. Last year's champion brought \$1.38 from Steinberg's, the firm that usually manages to bid in the champion. Just before the sale started it was announced that the champion had been turned over by Mr. French to Bob Macdonald, his herdsman for over twenty years. This generous gesture brought a round of applause, proof of the esteem in which Bob is held by the beef men who know of his tireless work with his herd.

Chanbay Farm's reserve champion weighed in at 975 pounds and was bought for \$1.25 by Eaton's. Mrs. Pitfield's champion Shorthorn brought 75¢ from Steinberg's, and from then on to the end of the list prices gradually declined with 25¢ being the lowest. However, counting in the prices paid for the top animals, the sale averaged 32¢, a good bit over current market prices.

The top pen of 3 hogs went to Modern Packers for \$3.00, and the pen of 5 to Canada Packers for \$1.50. Two other lots sold for 50¢, one went to 70¢ and all the rest brought 40¢, Wilsil's being the chief takers.

The champion wether and the reserve, both owned by E. G. Smith, brought \$4.00 a pound from Eaton's and \$1.00 from Don Maher at the auction. These prices didn't hold any longer than that, however, and the next lot, a pen of four, went for 27¢. Prices ranged around 30¢ for the balance of the lambs for an average of 36¢. Average price for steers was 32¢ and for hogs 35¢.

Breeding Classes

There were a lot of changes in the line-ups of the breeding classes at Sherbrooke this year. Whereas only two herds of Angus cattle came out in 1952, those of Dr. McCall and of L. S. Porter, there were seven exhibitors this year, without any Porter entries. Many familiar faces were missing from the Shorthorn classes; the herds of C. C. Warner, Mrs. T. C. Stuart, J. A. Woodward Estate and Ross Edwards, for example, were not represented. But their places were taken by others although the total Shorthorn show was a good bit smaller than last year's. There were no French entries in the Hereford classes but the other regulars were on hand plus several new breeders.

Shorthorns still dominate the fair in numbers, and the entries of Mrs. Pitfield of Saraguay dominated the Shorthorn classes. She had Calrossie Red Adonis for senior and grand bull champion, Lavender Duke for junior and reserve grand, Oakfield Princess Royal for senior and reserve grand female, and Saraguay Princess 2nd for junior and grand champion.

Reserve senior female was J. P. McIntosh's Mac-Mad Bar Lass 2nd and C. C. Warner had the reserve junior ribbon on Warnerlea Gypsy Maid. In the bull classes the reserve senior champion was E. S. Watson's Ransom's Heir and the reserve junior was Camson Cock Robin owned by Clifford Gaulin.

Hereford championships were better distributed. Eric Webster had the senior and grand champions in both sexes. Greenhills Farm had the junior male and the reserve senior female; J. C. Tanner the reserve senior and the reserve junior male and Murray Gardner the reserve junior female. Robert Nichol's entry was made junior and reserve grand female. All the group classes went to Greenhills Farm.

Aberdeen Angus classes were once again topped for the most part by the McCall entries. He had all the group class tops, all the female classes but one, all the female championships except two, and the senior and grand

champion bull. Carl McClay had the reserve senior and grand champion bull, S. L. Kerr the junior bull and E. G. Smith the reserve. McClay had the junior champion female and Kerr the reserve.

Recent Cattle Sales At St. Hyacinthe

The Quebec Holstein Breeders Association's sale, held early in October at St. Hyacinthe, saw 53 head sold for a total of \$21,375. Three young bulls were sold for \$635, \$425 and \$300 respectively, and the average sale price for 47 females was \$421.19. Three young heifer calves sold for \$70 for one, \$75 for the other two.

Highest price paid was the \$2,200 bid by W. K. MacLeod of Disraeli for the "excellent" cow consigned by Albert Fréchette of Arthabaska, Bois Franc Valentine Posch, the grand champion at the Victoriaville Black and White Show last summer. Low bid on the females was \$175, and ten of them sold for \$500 or over.

A couple of the animals were bought by Ontario interests, but all the rest will remain in this province. Chief buyers included the Laval Hospital at Quebec, l'Hospice St. Charles, Cap Rouge, Notre Dame de Foy Farm, Arthur Baumier of Shawinigan Falls and W. K. MacLeod, all of whom bought more than one animal.

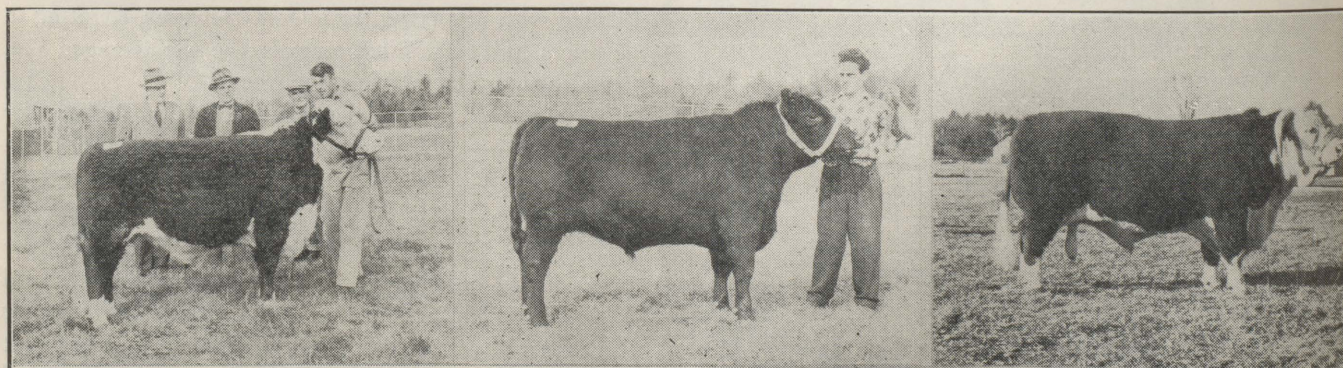
Hermas Lajoie and Réal Proulx managed the sale, and the auctioneer was Lorne Franklin. More than 300 breeders were present.

The September sale of Ayrshire cows and heifers held at St. Hyacinthe brought an average price of \$197.05 for the 27 head sold. Secretary of the Quebec club, François Boulais, managed the sale and H. J. Whittaker of Brampton, Vt. was auctioneer.

Top price was \$400 paid by the Quebec General Hospital for a three-year old consigned by Robert Roy of Howick. She is a daughter of Burnside Dairyman out of Cairnbrae Tibbie 14th.

Three purchases were made by a buyer from Rhode Island but all the other animals are staying in Quebec.

Champions All



At left is the Grand Champion steer, shown with J. MacMillan, chairman of the beef cattle committee, W. F. MacDougall, president of the E.T.A.A. and Bob and Peter McDonald, herdsmen for hon. C. D. French. In centre is the reserve champion steer, shown by Chanbay Farm, and at right is the grand champion in the Hereford breeding class, shown by Eric Webster.

A Fine Junior Show

4-H beef clubs are making great strides in the Sherbrooke area and there were about twice as many young people out with their calves as last year. Twenty-nine of them each had a heifer and besides that there were 24 steers. Five clubs were represented: Bury, Lennoxville, Island Brook, Waterloo and St. Romain. Placings in the inter-club competition were as follows:

Junior Shorthorn calves: Audrey Hoy, Bill Cloutier, Reg Page, Betty Painter, Garth McElrea, Billy Buck, Eden Cloutier, Donald McLeod, Jimmy McLeod, Larry Buck, Jean Marceau, Terry Lowry, Daryl Lowry.

Senior Shorthorn calves: Charles Warner, Wendell Gaulin, Doug Page, Marilyn Bennett.

Junior Hereford calves: Willy Jones, Leslie Skillen, Sternie Taylor, Ardyth Painter, Howard Chapman, Nadine Skillen, Beverly Skillen.

Senior Hereford calves: Robert Nichol, Murray Gardner, John Nichol, Robert Allen, Eldon MacDonald.

Shorthorn steers: Wendell Gaulin, Marilyn Bennett, Garth McElrea, Audrey Hoy, Bill Cloutier, Terry Lowry, Jean Marceau, Doug Page, Donald McLeod, Daryl Lowry, Reg Page, Jimmy McLeod.

Hereford steers: Robert Nichol, John Nichol, Murray Gardner, Howard Chapman, Willy Jones, Robert Allen, Sternie Taylor, Eldon MacDonald, Ardyth Painter, Beverly Skillen, Bill Tompson, Nadine Skillen.

Shorthorn group: Marilyn Bennett, Wendell Gaulin, Audrey Hoy, Doug Page, Garth McElrea, Bill Cloutier, Donald McLeod, Jean Marceau, Terry Lowry, Jim McLeod, Reg Page.

Hereford group: Robert Nichol, Murray Gardner, John Nichol, Howard Chapman, Robert Allen, Willy Jones, Sternie Taylor, Leslie Skillen, Ardyth Painter, Eldon MacDonald, Nadine Skillen.

Robert Nichol had the champion heifer calf at the show, and the champion steer. His brother John showed the reserve steer, and Charles Warner the reserve champion heifer. Audrey Hoy had the reserve champion Shorthorn heifer and Murray Gardner the reserve Hereford heifer.

The C. C. Warner special prize, for the club member showing the best Shorthorn heifer calf, provided the bull can be kept in the winner's herd for at least two years, was won by Douglas Page.

In the junior showmanship contest the four top places went to Charles Warner, Robert Nichol, John Nichol and Daryl Lowry. There were 23 others in the contest. Out of 35 in the open junior judging contest, Doug Page and Garth McElrea placed first and second judging Hereford steers, and Gordon Garfat and Doug Page topped those judging Shorthorns.

The Quebec Beef Judging Champions



Teams from five beef clubs competed in the finals of the beef judging competition at Sherbrooke to determine who would carry Quebec's colour to the Royal to compete there against similar teams from other provinces. Ardyth

Painter and Daryl Lowry, who missed the coveted trip to Toronto last year by a single point, upped their score by 10 points this year to take the C. D. French trophy. Again this year Miss Painter was high scorer with 546 points which, added to the 523 made by her partner gave a total of 1069 for the team. The Nichol brothers, Robert and John, were in second place with 997, followed by Robert Jennings and John Morris of the Sheenboro club and Wendell Gaulin and Gordon McLeod of Bury.

Enrolment in 4-H clubs reached an all-time record during 1953; 65,215 members in 4,869 clubs. This is an increase of 6,509 over 1952, and every province in the Dominion reports increased membership. Clothing clubs were the most popular with 13,040 members, dairy calf clubs came next with 11,859 and garden clubs had 9,795.

Membership in Quebec clubs was:

	Clubs	Members
Gardening	42	1159
Home decorating	11	215
Dairy calf	224	5480
Beef calf	6	108
Swine	4	68
Poultry	13	286
Sheep	2	27
Grain	10	248
Potato	28	545
Other projects	4	62
	344	8198

Batiscan Farmer Wins County Award

Champlain County has been running a better farming competition this summer in which 60 farmers took part and Auguste Bouchard of Batiscan has been declared the winner with a score of 88%.

Items taken into account in judging the farms include drainage work accomplished, proper conservation and use of farm manure, yields and quality of field and forage crops, efficient use of pastures, amount and quality of silage, general well-being of the livestock and cleanliness in the barns. Also, every contestant had to be a member of some county farm organization to be eligible. Six contestants were dropped from the contest during the summer because they had taken their animals off R.O.P.

The panel of judges consisted of Messrs. Armand Gélina, Pierre Villemur and agronome Ulysse Potvin.

Canadian Is World Plowing Champion

Jim Eccles of Brampton, Ont. is first world champion



The Golden Plow is presented to Jim Eccles by L. G. Fraser, Ontario manager of markets for Imperial Oil. At the left is J. A. Carroll, W.C.P.O. president.

THE first World Plowing Match has come and gone; and to the executive of the Ontario Plowmen's Association, who included this new event with the regular programme of their fortieth International Match must go congratulations for a job well done.

The groundwork for the World Match was laid at a meeting held in Scotland last fall, when J. D. Thomas, a special delegate representing the O.P.A. and Roy Shaver, a past president of that organization, met with representatives of other countries to plan for the first truly international contest.

There have been matches in the past in which competitors from several countries took part, and which were billed as "international". But the competitors always had to abide by the rules and regulations of the particular country in which the match was held, and this usually was a distinct disadvantage to the visiting teams. For several years interested people in various countries have been exchanging correspondence and holding conferences with the idea of working out a set of rules that could be accepted by all contestants and would be fair to all. This preliminary work bore fruit at the meeting in Scotland last fall where a World Championship Plowing Organization was set up with a Canadian, J. A. Carroll, as president, another Canadian, J. D. Thomas, as executive vice-president, an Irishman as vice-president, Englishmen as treasurer and secretary, and a board of directors from Sweden, Germany, Finland, Holland and Norway.

The objectives of the organization are stated as follows: 1. To provide a means of holding international competitions in the art of match plowing. 2. To raise the standard of plowing, soil cultivation and conservation in all participating countries. 3. By encouraging these better methods, to increase the world production of food. 4. To

encourage pride in recognized farm skills. 5. To promote the prestige of agriculture in all countries. 6. To make a substantial contribution to international understanding and goodwill among the citizens of many nations.

Any country may send not more than two contestants to the matches; they must be of championship calibre and sponsored by the authority representing plowing interests in their country. The contest is limited, at present, to trailer or mounted semi-digger two-furrow plows fitted with skimmers but no other attachments. Each competitor is required to plow in both sod and stubble and to plow his plot, which is approximately half an acre, in not more than three hours.

One man from each country is on the panel of judges, and the judges work in teams of three or four, each team handing in a separate report on each contestant's work.

Many Countries Represented

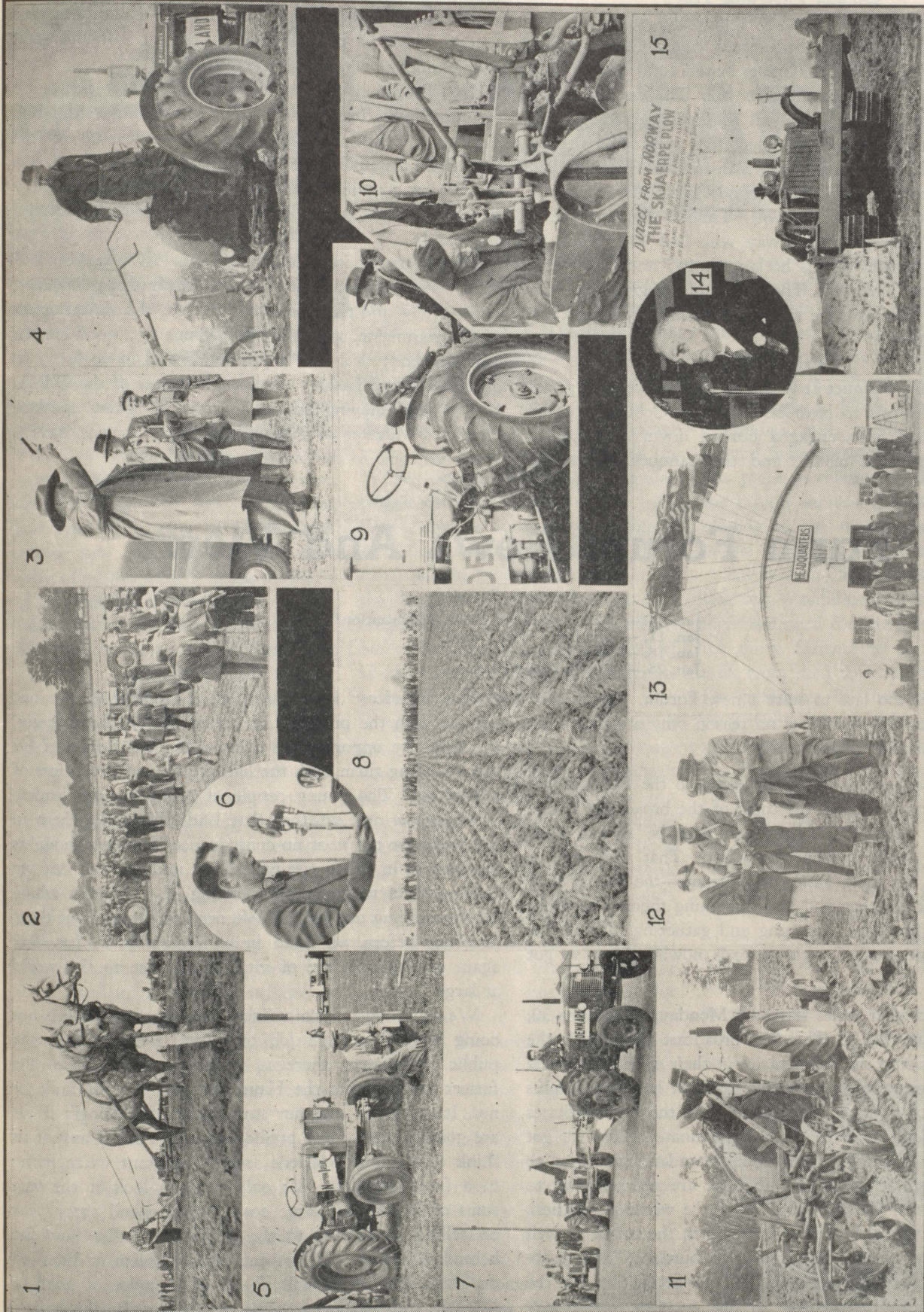
Including Canada, represented by Bob Timbers of Stouffville, Ont. and Jim Eccles of Brampton, eleven countries were represented. The United States team was composed of Graeme Stewart, the U.S. level-land champion, and R. C. Cummins, their contour-plowing champion. From England came Leslie Dixon, who has won 96 championships and first prizes for plowing at home (though he still hasn't come up to his father's lifetime record of 263 championships) and R. A. Hogg, also the holder of many championships. Northern Ireland sent R. J. Carse from County Down, and the Republic of Ireland was represented by R. G. Sheane, a county champion for many years, and Thomas McDonnell who was first in the all-Ireland match earlier this year.

Roman Donndorff works as a farm-hand on a farm at Baden in Germany and won his state championship this year. Backing him up was Jahn Horst who runs a 40-acre mixed farm at Westerwald, and who won the Rhineland-Palatia State match earlier. The Norwegian team was made up of Odd Braut who has won his district championship four years in a row, and Olav Nedberg who was runner-up to Braut.

The Swedish team was Allan Helin, who helps his father on the home farm, and Per-Göte Jonson, a former Swedish champion. Erik Bie manages a farm machinery station in Denmark and his teammate, F. E. Andersen, took second place in the 1950 Scandinavian matches.

Finland had one lone entrant, H. J. Sintonen, who operates a 72-acre farm and who won a county championship last year. The Dutch entrants were both farmers who had not too much experience in match plowing. F. T. L. van Gaalen has a 100-acre mixed farm, and Willen A. de Lint has his first experience in championship plowing this summer.

A cameraman's view of the first World Plowing Match



1. The World Match was a tractor affair, but many horse plow events were on the programme for provincial events. 2. A cosmopolitan crowd watched the plowing. 3. The opening gun for the final match was fired by Harry Campbell, chairman of the local committee. 4. This is de Lint, one of the Dutch contestants. 5. R. J. Carse from Northern Ireland prepares to open that all-important first furrow. 6. The CBC Farm Broadcast originated at Coburg; this is Norm Garriock in action. 7. All the competing plowmen paraded through the tent city before the start of each day's plowing. 8. Championship plowing; the land of Bob Timbers, Canadian champion. 9. Allan Helin of Sweden found some fellow-countrymen waiting to welcome him to Canada. 10. The Republic of Ireland's Thomas McDonnell took some time out for adjustments. 11. Here is the world champion in action. 12. Four of the judges, each representing a different country, confer on their scoring. 13. The flags of the eleven competing nations flew over Headquarters Building. 14. The first president of the World Championship Plowing Organization; J. A. Carroll of Toronto. 15. Among the hundreds of machines on display was this landbreaking plow from Norway.

Canada First and Third

By the end of the first day's plowing, in sod, it was evident that the Canadian plowmen would finish well up, with Norway, Sweden, Great Britain and the United States giving stiff competition. Bob Timbers earlier in the week won the Canadian championship with Jim Eccles runner up, and the spectators expected that this order would hold in the World match. However, when the final results were announced, Eccles emerged the winner with 154 points, with Timbers in third place behind Odd Braut of Norway who had 151. Helin of Sweden was right on his heels with 147 and Great Britain's Dixon had 146. The other Norwegian and van Gaalen of Holland came sixth and seventh by mere fractions of a point.

Prize-giving

The closing banquet at which all the trophies and prizes are awarded was to have been held at Coburg, but the hall that had been engaged burned down a couple of weeks before the match, and the banquet had to be

moved to Grafton, about 10 miles away. Here the ladies of the neighbourhood had prepared a real church-supper type of feast in the community hall, and almost 1200 people enjoyed the really delicious meal.

The Golden Plow was presented to Mr. Eccles by George Fraser, Imperial Oil's Ontario manager, and Bob Timbers received the Silver Plow, emblematic of the Canadian championship. The Republic of Ireland has provided a magnificent trophy to be held by the country winning the match each year, and this was also presented to Canada.

There was a host of other awards—silver tea services, chests of flat silver, Mixmasters, silver cups, watches, radios, etc.—and their presentation, plus the various items of entertainment, spun the evening out to a good length; but everybody was in a happy mood and in no hurry to go home. Floyd Lashley, secretary-manager of the O.P.A. kept things moving smoothly and the guest speaker, Ontario's Minister of Agriculture F. S. Thomas, gave a warm welcome to the overseas visitors.

Farm Forum News And Views

January Series

- Jan. 4. — What's the Ideal Farm Organization?
- Jan. 11. — The Farm Price Trend.
- Jan. 18. — Stop, Look and Listen.
- Jan. 25. — Fourth Night Feature.

IT'S never too late to start a new Forum. Just because the season has started is no reason why a group can't get together and organize now.

What do Forums do? They listen to the Farm broadcast; study and discuss the topic of the broadcast; decide how their mutual problems can best be solved; then follow up with appropriate action. That last item is important, the more action in a group—the keener they are to stick together and DO something themselves about their own problems. Listening and gathering information is important, but of itself it leads nowhere; you've got to act.

The December series starts on Monday, November 30, at 8.30 p.m. E.S.T. The first broadcast deals with the problems facing the democracies in their efforts to appeal to the other peoples of the world. How best can surplus food producing areas like Canada and the United States get their ideas over to the less fortunate? Have we got to take a lowering of our living standards in order to raise theirs? When we say that we are not referring to the farmers of Canada only, but to the whole population. If we are to make some sacrifices then the urban as well as the rural people must share the burden. These problems are worth thinking about and acting on for the future peace and security of the western world may depend upon the type of answers we come up with.

This broadcast is followed on December 7, by one dealing with the problems of young people. Are we giving them the opportunities to broaden their thinking? Or are we filling them with the half truths and prejudices of a past age? The young people of today are the leaders of tomorrow and whether that leadership takes them to high office or not is of no consequence, for their thoughts and actions in either case will reflect upon others. Are we helping them to grasp the meaning of the forces which are remoulding our world? We need to think about these problems before we listen in on December 7, for here again our answers are of vital importance to the world at large.

We have always maintained that the farmers are not doing a good enough job of selling themselves to the public. Whenever there is a rise in retail prices the farmer usually gets the blame whether it's his fault or not. It's time we told our story more convincingly if we are going to better our public relations. And if any of us think that public relations aren't important we're living in a fool's paradise. We only need to look at the vast sums of money our large corporations spend every year on selling themselves to the public to realize how far behind we are in this respect. This problem is discussed on December 14. It will do all of us a lot of good to listen in and sharpen up some of our ideas on the subject beforehand.

Veterinary Topics

by D. G. Dale, D.V.M.

Diseases Of The Newborn

IN our last article we discussed several of the common conditions affecting the dam and offspring at the time of birth. The average farm animal will probably never be as susceptible to disease as it is during the first few days of life. The sudden emergence into a world of varying temperatures, intermittent nutrition, exposure to germs, is a tremendous transition for the newborn to endure after its protected prenatal life in the uterus. Calves especially are born with few, if any, antibodies to protect them from bacteria. For some reason that we do not know, nature chose to make the fetal membranes and placenta (lining of the uterus) of the cow impervious to the antibodies that are present in the mother's blood. She did, however, arrange that these blood antibodies diffuse into the first milk in great numbers. Thus it is extremely important that all young animals and calves in particular receive the colostrum (first milk) from the mother for at least the first 48 hours of life and preferably even longer. This is probably the most important step in controlling the occurrence of "White scours" of newborn calves.

Early fatal diarrhea is of quite common occurrence in all newborn mammals and at one time was a serious problem in human medicine. The problem in human infants is controlled nowadays by strict and exacting sanitation in hospital nurseries. It is not entirely practical to apply the same extreme precautions to veterinary medicine, but where calf scours are a problem, the first step must be directed towards improving the sanitary conditions of calf care. These sanitary precautions will include separate clean and disinfected calf pens for each calf, cleaning and sterilizing of feeding utensils, complete isolation of sick calves. In some cases it is found that even where

sanitary measure far above average are carried out the infection seems to stubbornly persist in a barn. In these instances prophylactic treatment of all newborn calves is recommended. There are many drugs available today that are effective against the bacteria that are commonly found in White Scours. The more popular commercial preparations usually contain several of such drugs in convenient capsule or table form. These drugs should be obtained from or by the direction of your veterinarian as frequently it is found that an effective remedy in one area will not be as effective when tried in a different part of the country.

Another problem that occurs when sanitation is poor or when calves are allowed to run together, is umbilical infection or "Navel Ill" as it is usually called. Normally the umbilical vessels "shriveled up" rapidly after birth and the entrance of harmful bacteria is thus prevented. Where a number of calves are housed together in one pen, often they will suck at one another's navels. This practice tends to produce a damp, open avenue for germs and since bacteria are ever present in the animals' environment infection very often occurs. Sometimes the invading organisms remain localized at the site of the navel and produce an abscess, very often however they find their way into the blood stream and are distributed about the body to cause a variety of conditions including a type of septic arthritis from which animals rarely recover. The practice of applying a good antiseptic to the navel of the newborn immediately after birth is

a cheap and efficient method of preventing this trouble. Five percent tincture of iodine is quite satisfactory for this purpose in all farm animals.

U.S.A. Population Outpacing Milk Output...

Annual milk production in the United States now stands at a record low point in relation to the needs of the rapidly increasing population, according to the recent annual report of the Bureau of Dairy Industry.

The Bureau Chief, Dr. O. E. Reed, sees two possibilities for meeting the increased need for dairy foods; one is for dairy farmers to produce more milk from each cow and the other is for processors to convert a greater proportion of the available milk supply into forms suitable for human food. Dr. Reed pointed out that the average milk production per cow is only 5,326 pounds a year, compared with the average production of about 9,000 pounds a year from over one million cows in herds maintained by improvement associations. It is claimed that higher yields could be obtained by other farmers if they followed the same improved methods of breeding, feeding and management that have been so successful in these herds.

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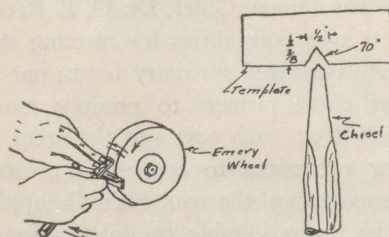
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DAIRY FEEDS

Grinding A Cold Chisel

For general work, cold chisels should be ground with the faces on the cutting edge making an angle of about 70 degrees with each other. When thin or soft metal is to be cut the point can of course be sharper. In order to obtain the correct angle a checking gauge (as illustrated) can be made from a piece of tin.

When grinding this tool, it should be firmly grasped in the right hand with the first finger underneath and next to the grinder rest. Press the cutting edge of the chisel against the wheel with the fingers of the left hand, and swing the handle back and forth with the wrist of the right hand to give the point a slight curve. Care must always be taken to dip the chisel in water frequently to keep it cool, as heating spoils the point by making it soft.



— GRINDING A COLD CHISEL —

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Agricultural Films Prominent...

Motion pictures on Canadian agriculture are not only getting worldwide distribution, but special attention is being given them in various international competitions. One of the most recent productions sponsored by the Canada Department of Agriculture and produced by the National Film Board is a film on soil, "The World At Your Feet". It has been entered in the fourth international Documentary Film Exhibition at Venice, Italy; the Edinburgh Film Festival, Edinburgh, Scotland; the film exhibition at the 23rd annual meeting of the Biological Photographic Association, Inc., Los Angeles, California; the seventh annual Congress of the International Scientific Film Association, London, England; and the International Rural Film Festival at Rome, Italy.

Also entered in the Rome festival are four others films from the Department: "Pole Barns and Milking Parlours", "Forage Harvesting", "Surface Silo" and "Western Wheat". "The World At Your Feet" will also be entered in the next Canadian Film Awards.

Films sponsored by the Depart-

ment and produced by N.F.B. have won previous awards. "Milk-Made", a film on Canada's dairy industry, and "Western Wheat", were awarded major prizes in the Canadian Film Awards in 1951 and 1952. "Milk-Made" also took top place in an international film competition in Italy.

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Cow Population Up:

For the second consecutive year Canadian milk cow numbers show a sharp increase according to a survey just released by the Dominion Bureau of Statistics. The increase as at June 1st, 1953 amounted to 178,000 or 6 per cent over the same date a year earlier, bringing the total to 3,146,200 or just over 1 dairy cow for every five men, women and children in Canada. The dairy heifer and calf populations also showed gains over last year of 2 per cent and 6 per cent respectively. The Maritime Provinces and Central Canada showed substantial increases in cow numbers but decreases were reported in Manitoba and Saskatchewan.

Dairy Cattle Exports Down:

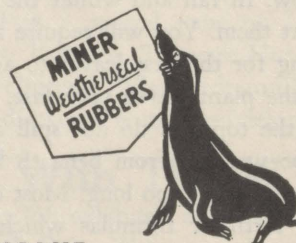
Dairy cattle exports to the United States for the six month period, March to August inclusive, (following removal of the U.S. import ban) amounted to 27,860 head. This is about 9 per cent below dairy cattle exports for the corresponding period of 1951 and 28 per cent below the same period of 1950.

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THE WOMEN'S INSTITUTES SECTION

*Devoted to the activities of the Quebec Institutes
and to matters of interest to them*

Flowers In Winter

Most amateur gardeners feel a pang of regret when Jack Frost takes the last of their flowers in the garden, and they think of all the dreary months ahead before they will have them again. With a little careful planning we can have blooms all winter.

African Violets

These are easy to grow. They need a little planning ahead but can be started from leaves. Fill a small pot with rich soil, put in a leaf and water well. Place a cellophane bag over the pot. This hold the moisture and the leaf will not need to be watered for many weeks. As soon as small leaves start from the parent stem, you can remove the bag and place the plant in a sunny window. In fall and winter the sun is not strong enough to hurt them. You will require a good supply of patience waiting for the first leaves to appear, but they will, and then the plant grows very fast. Water with warm water from the top and do not spill any on the leaves. It can also be watered from beneath but do not leave the pot sitting in water too long. Most dime stores carry African violet fertilizer formulas which will produce more and better blooms for you but do not apply more than once every three weeks.

Bulbs

Buy a few bulbs and you will be well repaid for your trouble. Paper white narcissus are easily grown. Pot, and leave in a warm dark place until green appears at top of bulbs, then bring them into the light. Tulips and daffodils should be planted late in October to have blooms in February. Place moist soil in a pot to within two inches of the top, cover the bulbs until just their noses can be seen, and place in a dark storage place. When sprouts are about four inches high, bring into the light. Hyacinths can be grown in the same manner.

Amaryllis is a dignified, stately bloom, which we should see more often. It should be potted in small containers, with one third of the bulb above the soil. Water thoroughly, place in a warm spot, keep watered, bring into light as soon as growth appears and put it in your sunny window. Some morning when you wake up you will discover you have a lovely flower. It seems to happen just like that with *amaryllis*—no lagging behind and wearing out your patience. After it is through blooming the leaves will turn yellow and dry up. Just leave the bulb in the pot and it will be ready to force again next fall.

Gloxinias can be grown from a leaf cutting, but come on more quickly from a bulb. The latter will bloom about five months after planting.

A few small cactus plants like "Rose of Sharon" provide pleasing greenery and take up very little space.

Brighten up your dull rooms this winter with some gay, cheery blooms and see what it does for your morale. Next best thing to having a new hat.

A Great Gardener

It may prove interesting for you to hear something about a man who worked all his life to give us the best in flowers, a great horticulturist, Luther Burbank.

"You are nearer God's heart in a garden,
Than anywhere else on earth".

These words are on a plaque in Luther Burbank's garden in California and I feel sure that most gardeners feel as he did about it.

Although most of us are only amateurs and he was one of the greatest, we can echo those words.

Burbank was born in Massachusetts in 1849. From a young child he was greatly interested in trees and flowers. He began his life work as a market gardener and raiser of seeds, producing the famous Burbank potato, of which more than 600 million bushels have been grown.

In 1875 he went to California and settled at Santa Rosa, 50 miles north of San Francisco. He called this place the "greatest garden spot on earth". The climate and soil were ideal for his general line of "crossing" and "selection". Crossing is the uniting of two plants to produce a third. The pollen of a plant is gathered just before it is ready to fall and is applied to the blossom of another species by fingers tip or small brush. Selection means the choosing of the best plants. Sometimes he chose only one from among thousands, and burned all the others.



Valcartier Branch loses a valued member. Mrs. Donald Kidd, convener of Welfare and Health, is presented with a gift prior to her departure for New Carlisle. Her husband has been transferred to the Anglican Church at that place.

He worked for years with the prickly pear cactus and finally produced a spineless cactus growing from eight to 16 feet tall. Its fruit is something like a cucumber in shape and is crimson, orange, purple and white, and its flavours are as numerous as apples. The stalks are used for stock feed, having half the value of alfalfa, and will produce 75 tons to the acre.

Among the many beautiful flowers he created is the popular Shasta Daisy, named after his favourite snow-capped peak of the Sierra Mountains. This is the offspring of the English daisy, our common field one, and the Japanese Daisy. This lovely Shasta will give you blooms all summer from four to six inches in diameter.

His flowers are a joy to see, each kind in a plot by itself, with the names on them so that visitors can distinguish them. There are hundreds of acres set out with flowers, fruit trees, vegetables, etc.

Burbank spent all his life working to improve and produce better varieties. Visiting nearly all the countries of the world, he brought back specimens from every land. You may see trees from Australia growing beside the white birch from Canada. There is a beautiful cedar tree which he brought from Lebanon growing beside the porch of his house. He is buried beneath this tree, and fresh flowers from his garden are placed there every day.

His opinion was that "whoever could make two ears of corn or two blades of grass grow upon a spot where only one grew before, would deserve better of mankind and do more essential service to his country than the whole race of politicians put together".

From a talk by Mrs. Moore, Fordyce W.I.

A Wonderful Time

On an afternoon in August, ten Bury girls and their counsellor, Mrs. Tarrant, gathered at the camp site, half a mile from Bury, to enjoy a week of "roughing it" outdoors. The camp consisted of a big marquee tent, two bell tents and a small cabin.

The first two days were spent in preparation for twelve girls from other Junior branches, who arrived later with



Writing the special camp edition of Jaywee.

Miss Campbell, Miss Bruneau, Miss Maunsell, Mrs. Sicard and Mrs. Bernhardt.

A very enjoyable schedule, which included swimming, boating and canoeing, was prepared by Miss Campbell. Campfires were built and games played on many of the nights spent in camp. Squads were appointed to help serve meals.

Friday morning each branch made a poster representing their group project, for display Saturday night. Late Friday afternoon a long treasure hunt was held with a picnic supper at the end of the trail. Practices were held on Friday and Saturday for a party in the Town Hall, to which parents and friends were invited. A "Track Meet" took place on Saturday morning, in which every girl took part.

Sunday morning all the girls packed up ready to leave in the afternoon. We all wrote essays of the past week for this special edition of "Jaywee News".

We hope very much that all the girls had as wonderful a time as we Bury girls did. Maybe we can do it again next year, hey?

(Reprint by permission, Jaywee News)

(The essays referred to above, in this article written by the Bury girls, appeared in a special issue of Jaywee News under the headings: Fashions, Treasure Hunt, Social and Personal, Sports, Cultural, Want Ads and Found Column. The originality displayed is most refreshing.)

The Month With The W.I.

"An unexcelled display of exhibits" says the report from Bonaventure School Fair. This was under the direction of Marcil, Shigawake and Port Daniel Institutes, and held in the Shikawage Town Hall. Prizes amounting to \$102.20 were given in addition to 10 Five Roses cookbooks donated by the Lake of the Woods Milling Co. The latter were awards in the cooking classes. A pleasing ceremony was performed at this time when Mrs. John Walker, first vice-president for the county, presented badges to members of the Port Daniel-Shigawake JWI, who had completed two projects, gardening and knitting. This aroused much interest.

Several other Institutes mention School Fairs. Franklin Centre, Hemmingford, Howick and Aubrey-Riverfield (a joint project), give no details beyond the expressive word "successful". Sawyerville had its fair with 600 exhibits, a fine start we'd say. Stanbridge East always has a Hobby Show in connection with the fair there and \$84.50 was the amount given in prizes. Branches in Sherbrooke County assisted with the prize list and North Hatley helped place exhibits at the Stanstead County fair and was in charge of the rummage sale always held in connection with that event there. *Where are our pictures?*

Bonaventure: At New Richmond Inspector S. V. Cottermull gave a talk on "Education" and work done during the course "Painting for Pleasure" was on display. The yearly canvass for jams, vegetables and canned goods for the hospital is being carried on. *Port Daniel* heard the



Some of the members of the Granby Hill W.I.

essay by Catherine Hargreaves, the 18 year old English girl who won fourth place in the ACWW essay competition. Donations of \$6 and \$4.50 were given respectively for next year's Agricultural Show and School Fair. Mrs. Russell Dow was welcomed to membership and two Juniors were present, Shirley Sweetman and Sandra Tourneau. *Port Daniel-Shigawake* Juniors enrolled two new members, Patsy Sullivan and Treva Huntingdon, and Veryl Sullivan was appointed to carry on as president for the remainder of the year. A card of congratulation was sent to Mrs. R. Prévost, counsellor, on the arrival of a son. Freda Huntingdon and Shirley Sweetman were presented with Queen Elizabeth II Coronation plates for their excellent Coronation scrapbooks. A new project, smocking, is to be undertaken with Mrs. W. Walker as instructor.

Chat-Huntingdon: *Aubrey-Riverfield* entertained the Howick School staff. Old cottons were brought in for the Cancer Society, 35 cans of apple sauce were donated to the Barrie Memorial Hospital and 115 cans to the Howick School Cafeteria. *Dundee* heard a paper on "Soaps and Detergents", read by Mrs. A. H. Fraser. *Franklin Centre* realized \$22.26 from their booth at Havelock Fair. A demonstration on smocking was given by Mrs. Glen Waller. *Hemmingsford* had a demonstration by Prof. Maw of Macdonald College on how to draw a chicken, also a talk on "Poultry and Poultry Products". Miss Dorothy Fisher was the recipient of the W.I. Scholarship Shield, which is awarded annually to the pupil in Grades VIII-XI with the highest standing. A donation of 12 pairs of pillow cases has been given Barrie Memorial Hospital. *Howick* entertained the Howick High School staff. Fruits and vegetables were given to the school cafeteria and a collection of canned goods to the Barrie Memorial Hospital. A gift subscription to the Home Economics Journal has been given to Howick and Ormstown High Schools. Mrs. Mickle gave a talk on her trip to the Coronation, at the meeting, and displayed several souvenirs. *Huntingdon* had a shower of jams and jellies for the Huntingdon County Hospital and paid \$100 on account, for the pledge made to the new wing of that hospital. Mrs. W. Smallman reviewed the highlights of her trip to Europe a few years ago as

delegate to the Copenhagen Conference and Mrs. Alex Robb gave a demonstration on Candy Making. Mrs. Wallace Mirson brought a "One Hundred Dollar" chocolate cake and told how to make it, every member enjoying a sample.

Compton: *Bury JWI* held a corn roast at Olson's Pond, the site of this summer's Junior Rally. The shell project has been completed and a knitting project is now planned. *Cookshire* entertained 41 members of the ACWW at a tea at the home of Mrs. J. A. Fraser. A \$50 bursary was given to a boy to continue his studies and \$10 was loaned to a girl student. Other donations are \$5 for cups and saucers at the school and \$25 towards next year's school fair. On the other side of the ledger \$118 was realized from booth at the Fair and \$41 from a food sale. Mrs. Robinson read a paper on "Sponge Rubber". *Canterbury* sent a box of books to the Ste. Annes Military Hospital and donations were made to the Q.W.I. Service Fund and the Bury school fair lunches. *East Clifton* heard reports of the demonstration and school fair. A spelling bee was held, also a contest, guessing the number of kernels on a cob of corn, with prizes. *East Angus* raised enough money to send seven members to the ACWW Conference and each gave a fine report at this meeting. *Sawyerville* had a visit from an ACWW member from New Zealand, who gave a talk on her country and W.I. activities there. *Scotstown* had a picnic at Newport, Vt. The teaching staff was entertained. *South Newport* received a donation from Mr. R. Planche and plans were made to entertain the Compton County semi-annual meeting.

Gaspé: *L'Anse-aux-Cousins* heard a paper on "Beautiful Craftmanship from Canada's Ten Provinces", read by the convenor of Publicity. Members paid a fee, "the size of your waist". Plans were made for the fair and a parcel post sale, and members donated cotton for the Cancer Society. *Sandy Beach* held a cookie competition, with prizes, and a demonstration on canning was given by Mrs. C. Miller. A donation of \$5 was voted the Korean Barley Fund and flannellette was given out to be made into night dresses for Korean children. *Wakeham*



An anxious moment—will it fit? Miss Campbell with her class in sewing at Inverness.

entertained all the other branches at a social evening. A film was shown and games were enjoyed. Donations were made to county funds, the Q.W.I. Service Fund and a box of clothing was given to the W.A. to be sent to Labrador.

Mégantic: Inverness made plans for the semi-annual county meeting, which will be held at the home of Mrs. Lloyd Oliver. The sum of \$6 was donated for prizes at the school opening.

Missisquoi: Cowansville had a paper on "Suggestions for Making a Will", read by the Citizenship convenor, Mrs. Winsor. Cotton was collected for the Cancer Society. Dunham had a paper given by the convenor of Welfare and Health, Mrs. Martin, and Fordyce also had a program on Welfare and Health, with the convenor, Mrs. Longeway, reading an article on "Mental Health". A case of milk was given to a needy mother. Stanbridge East featured a musical program. A food sale was held and the debt on the Memorial Hall was reduced by \$75.

Québec: Valcartier Village cleared the sum of \$300 at the annual bazaar. Films were shown by the convenor of Home Economics at the meeting, "Food for Thought", "400 Years in Four Minutes", and "The Apple Valley", and a talk given on "Health". The sum of \$50 was voted to a needy family.

Richmond: Cleveland held a rummage sale that netted \$34.50. A social evening was arranged for members and their families and cotton sent to the Cancer Society. Denison's Mills had a bee to clean the hall and new drapes were put up. Melbourne Ridge had a quiz contest on names of places in Canada with the prizes won by Mrs. C. Gilchrist and Mrs. G. Stantborpe. A film showing by Mr. and Mrs. Brown netted \$15.25, and a card party realized \$18.41. Richmond Hill had a sewing course under Miss Campbell and a card party is planned. Spooner Pond heard talks by Mrs. T. P. Ross, who spoke on "Yesterday a Colony, Today a Nation", and Miss Huffman, on "Stoney Creek", formerly her home, and a trip to Alaska. A party brought \$40.50 to the funds and \$5 was donated to Richmond County Fair for prizes. Shipton had a talk on "Australia" by Miss Henry, teacher at Asbestos-Danville High School. The cup won by Patsy Kerr at the school fair was displayed. Windsor Mills had as guest speaker, Rev. H. G. Hodder, who spoke on his home, "Newfoundland".

Rouville: Abbotsford had a humerous reading by Mr. H. W. Gendreau of Granby, "The Sunny Side of Life". A collection of 30 jars of jelly was made up at this meeting to be forwarded to the Montreal Diet Dispensary.

Shefford: Granby Hill held a rummage sale netting \$60. Articles were brought in for the fall sale and a case of soup was given to Granby High School for lunches. Warden had a letter from a ACWW delegate from Holland who had received one of the Warden W.I.



A group of members from the Wyman W.I. The secretary, Mrs. McKechnie, is first on the left and the president, Mrs. Stanley, is next to the end at the right. At extreme right is Miss Pritchard.

scrapbooks. An auction of canned goods brought \$6 and a contest arranged by the convenor of Agriculture formed the program at the meeting. Warden JWI is having embroidery for the next project. A party is to be held in the Waterloo High School.

Sherbrooke: At Lennoxville a "Workshop" is being held for branches in this county. This is in the W.I. Club room and courses in leatherwork (beginner's and advanced), slipper and rug making are in full swing under the supervision of Miss Hasel. At Ascot a report of Canada Day was given by Mrs. A. Coates and Mrs. L. Butler. Mrs. Coates also gave a broadcast over CKTS on the same subject. Money prizes in all grades have been given at Lennoxville High School. Belvidere heard a report of the ACWW Conference given by Miss Edna Smith, and Mr. Norwood of Lennoxville gave a talk on new varieties of seed potatoes and distributed samples of seed corn. The annual vegetable and flower exhibit has been held, with Mr. Norwood as judge. Cherry River made plans for the showing of a Health film. Milby heard an account of Canada Day, given by Miss Edna Smith of Belvidere. The sum of \$10 was voted for school prizes.

Stanstead: North Hatley members joined with the Home and School Association in a party to welcome the staff of the High School. Way's Mills has completed another weaving course under Miss Hasel. A picture of the Queen has been purchased for the Community Hall. A travelling library is being sponsored.

Vaudreuil: Cavagnal had a film on Quebec Handicrafts and held a sale of handwork by the members. The sum of \$25 was voted for the Q.W.I. Service Fund. The semi-annual county meeting was held the same day with this branch as hostess. Harwood celebrated the 6th anniversary. A film on Nova Scotian Handicrafts was shown. The annual card party will be held this month.

Teaching Modern Husbandry In Malaya

by Phyllis Davies

English feature writer and journalist formerly
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SIDE by side with the battle against Communist terrorism in Malaya is an unceasing campaign to raise the country's standards of living. The latest contribution to this end, by the teaching of modern methods of farming, planting and animal husbandry, is a training course for local chiefs and village headmen sponsored by the Rural and Industrial Development Authority. Forty-six of these leaders have completed an eleven-day course at Ipoh with such satisfactory results that the Authority assisted by the State Government, is planning a similar country-wide course for kampong (hamlet) leaders at Serdang.

So enthusiastic were the first trainees that the original plan for the initial course had to be changed. It had been arranged in four sections—the cultivation of coconut, padi (rice), rubber and miscellaneous crops and stocks—and the trainees were invited to attend whichever they chose. All chose to attend every course, and asked for opportunities to attend further courses.

Ploughing And Harrowing By Tractor

Specialized Government departments provide the technical knowledge and assistance for all attending courses. These comprise practical demonstrations as well as lectures. At the first course there was, for example, a visit to the animal infirmary at Ipoh where the local chiefs and village headmen learned of the proper and profitable me-



An interested group of local chiefs and village headmen in Malaya watch a Veterinary Department official inoculating a fowl against disease. Training courses in agriculture and animal husbandry, sponsored by the Rural and Industrial Development Authority at Ipoh, help to combat the conditions of backwardness on which Communist agitators have batten-



Local chiefs and village headmen watching a tractor demonstration in Malaya. Training courses in agriculture and animal husbandry are sponsored by the Rural and Industrial Development Authority at Ipoh.

thods of rearing poultry, goats and cattle and of improving their stocks. The use of tractors for ploughing and harrowing was demonstrated by the Agricultural Department. Official of the Rubber Research Institute gave talks on new planting and replanting of rubber and of methods of central processing of smallholders' rubber crops. Not the least important aspect of the course was community health services.

The trainees visited the Ipoh hospital where they witnessed three operations, including a Cesarean birth. Dr. Megat Khahs bin Megat Omar, State Physician, Perak, spoke on rural health, and Inche Ahmad Salleh, Inspector of Malay Schools, gave talks on education. Civics, social welfare, Malay customs and traditions were the subjects of addresses by other authorities.

The course undoubtedly inspired the leaders attending to action not only in their own localities but also collectively. Before they dispersed they decided to form an association covering the whole of their State so that they can discuss among themselves their problems, reach solutions and arrange for refresher courses.

As one of them expressed it: "We have been very impressed with the extent and scope of what the Rural and Industrial Development Authority can do for us and we shall certainly try to qualify for its assistance in developing our communities."



THE COLLEGE PAGE

The Macdonald Clam

Notes and News of Staff Members and Former Students

They Brought The Farm To The City

Pierre Veillon and Bob Simpson, both graduates of the Diploma Class of 1939, are sold on Jerseys—so much so that they both gave up a week of their time last month to man a booth at the Dairy Show to plug the Jersey breed.

Space at the show was reserved by the Quebec Jersey Breeders' Club with the idea of selling the virtues of Jersey milk and cream to Montreal housewives. The boys and their assistants passed out samples of milk and cream, made butter on the spot, and handed out literature extolling the value of Jersey products. The young lady in our photo is Miss Louise Genest, Queen of the Ste. Adele Winter Carnival in 1953 and a well-known personality on the French radio and TV networks. Their other assistant, who unfortunately was off duty when the photograph was taken, was Miss Vickey Wickham, also a graduate of the Diploma Course, who was formerly on the staff of the Jersey Breeder.

Pierre and Bob, as those of our readers who follow the exhibitions know, are both farming; Pierre at Sweetsburg where he has a herd of some 250 head, and Bob at Richmond where his 160 Jerseys keep him busy. They report a lively interest in their booth on the part of the public, especially when their little churn was busy making butter from the cream on top of a bottle.



Bact Vita—What Is It?

Maurice Gignac, a graduate of the class of '45, is working on something novel. He and his brother Jean-Paul, in collaboration with bacteriologist Paul Avard, are making grass grow where one would think grass couldn't grow.

One of the problems faced by engineers when they build a bridge or a highway or a railway line where sloping banks are involved is to prevent these embankments being washed away by rain. The only way to anchor the ground and prevent erosion is to plant it with grass, either by seeding it down or by sodding. Sodding is a tremendously expensive method, and impracticable in remote districts. Seeding will succeed only if there is something in the embankment on which the grass roots can live, and if they get no check during the rather long germination period. A period of dry weather following seeding, or a period of washing rain may destroy the work and force re-seeding; and this may happen several times during the same season. An embankment consisting entirely of stone or gravel, as most do, offers little chance for grass to survive for long.

The Gignac brothers and their collaborators have solved the problem, however, and the way they have done it makes an interesting story. The operations described are those used on their latest job, seeding down the approaches to the new bridge across the St. Lawrence at Valleyfield, Que.

Arrived on the job, their first step was to secure a supply of earth, which they did by scraping up what they wanted right on the spot with a bull-dozer. The quality of this earth apparently is not important; it can be anything that is available. The earth is ground fine and to it are added specific quantities, depending on the analysis of the soil, of Vigoro, bonemeal, blood meal, sheep manure, oats, peas and grass seed and a material known as Bact Vita. Sometimes peat moss is added also. This mixture is piled and allowed to age; 10 days is the minimum time; a longer time is preferable. The seeds germinate in the pile, the fertilizers enrich it, and when it is time to use it, the soil is a soft, rich mellow material, with a density of from 35 to 45 pounds per cubic foot, which is the basis for later operations.

The theory of the operation is to add grass seed to this soil and spread the mixture on the embankment. The machinery that does this was developed by trial and error by the operators, and much of it was made by themselves. In practice, the prepared soil is screened, then placed in a hopper on the machine. A worm screw carries the soil from the bottom of the hopper through an open trough, and as it moves along seed and more fertilizer and Bact Vita are added to it, in definite amounts. The mixture of soil and seed then goes into the blower, which blows it through a 3-inch hose onto the embankment to a depth of one-quarter inch. Water is applied when necessary until the grass is established. These steps are shown in the accompanying photographs.

The grass mixture used on this particular job consisted of

Bent grass.....	20%
Timothy.....	20%
Rye grass.....	20%
Alsike clover.....	5%
White clover.....	15%
Canada Bluegrass.....	20%

This mixture was used at the rate of 1 pound to 400 square feet. To it is added oats at the rate of 1 pound to 1000 square feet, to act as shade and to stabilize the soil while the grass roots are getting established. When seeding is done in the fall, the oats are increased to 1 pound to 150 square feet.

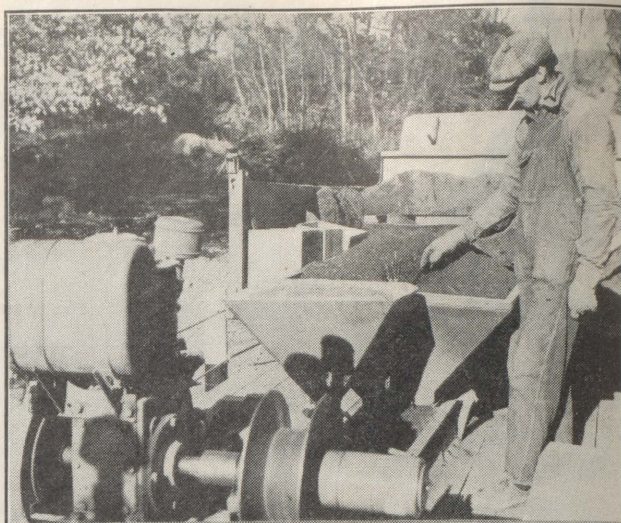
Additional fertilizer is added to the soil-seed mixture as it goes through the machine. For every 100 square feet to be seeded, they add

4 pounds	sheep manure
4 "	bonemeal
4 "	Vigoro
4 "	blood meal

and 1 pound of Bact Vita for every 1200 square feet.

Results are astounding. Growth begins almost at once, and within three or four days a good covering is visible. The sensational growth is due, of course, to the very rich medium in which the young plants germinate; and a careful watch is kept on weather conditions to see that there is no check. The watering tank is kept ready for any emergency.

A question that is most often asked is "How can the grass keep on growing in stones?" Obviously, it will grow so long as it has the blown-on soil to live in; but under this quarter-inch is only stone. Well, the Bact Vita (the composition of which is Mr. Avard's secret), apparently is what does it. It establishes a bacterial flora among the rocks which constantly increases with time. Since the grass on these embankments is not clipped, the dead grass forms a supply of nutrients for succeeding crops, and natural re-seeding is always occurring. A cover established along the Talbot Boulevard in the Lake St. John region by this method is still flourishing, and it was seeded in 1947. As Mr. Avard puts it: "With Bact Vita — good grass. Without Bact Vita — nothing."

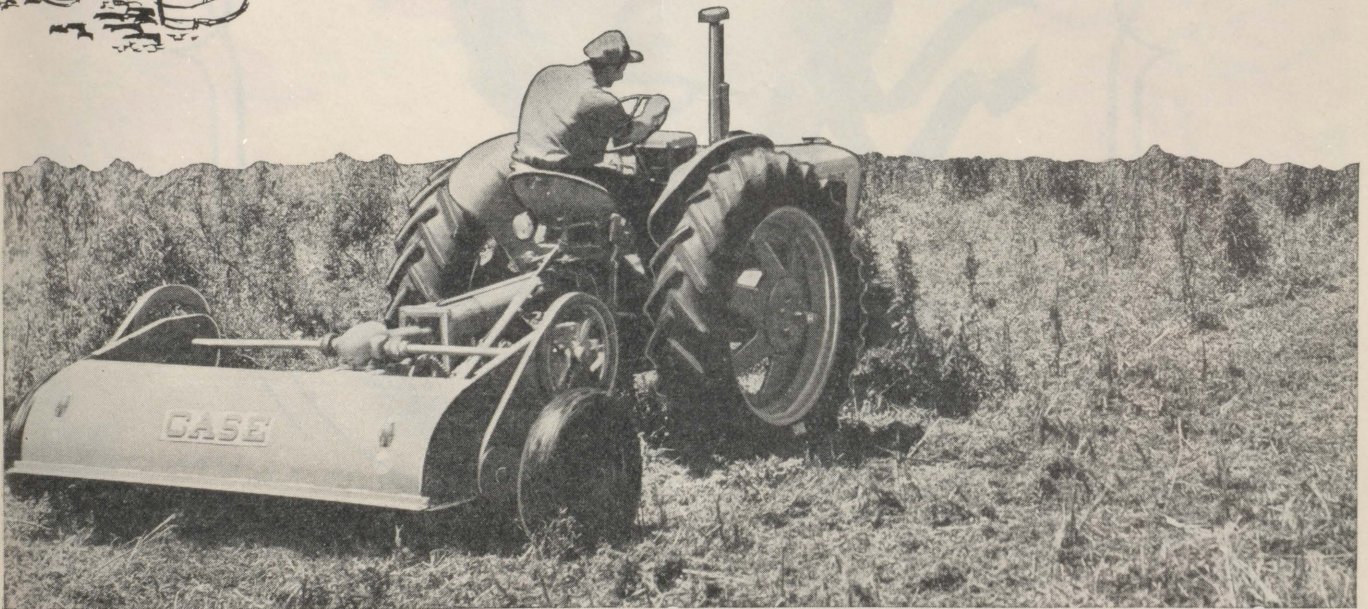


The prepared top-soil feeds from the hopper to the trough below, where it has grass seed and fertilizer added to it from the smaller hopper seen in the foreground. In the centre picture a workman is handling the hose through which the soil-seed mixture is blown onto the embankment to a depth of only a quarter of an inch. A gentle watering completes the operation.

the PROMISE is to you.... and to all Farm Youth



The farm toward which your fancy turns is not the farm your grandfather knew, nor even your father. To be sure, the same old trees are only a little taller, and some of the old buildings cut the same familiar pattern against the sky. But the soil that will be there to till can be rich with new fertility from the magic of chemistry and the by-products of industry. The carpet of grass beneath your feet may be in truth an oriental rug, grown from seed found in a Far East wilderness. Crop varieties and livestock strains will be productive beyond the dreams of your forebears. Already the promise begins to unfold—and the promise is for you, the student of today, the counsellor or the farmer of tomorrow.



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